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COMMUNICATIONS.

THERAPEUTICS OF DIPHTHERIA.[1]

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Mr. President:—You have conferred upon me the honor of an invitation to make some introductory remarks to your discussion on the treatment of diphtheria. This invitation I was anxious to accept, if for no other reason than to see the profession of Philadelphia at their home, and at work. That I should bring anything new to you, or striking, I never for a moment believed, since I was ever in the habit of reading your books and journals, and the proceedings of your societies. But it pleased me to infer from the demand that I should appear before you, that I was, to a certain extent, considered one of you, and to prove by my willingness to come that I appreciated the honor offered.

When I considered the subject which is to be the topic of your deliberations this evening, and remembered the vastness of its literature, it became clear to my mind that a digest, even so small, of what has been written, would fill more than many evenings, and still fall short of accomplishing the object in view. I was aware that I must not come here with literature. You will excuse me, therefore, for only detailing in plain language some of the facts gathered in my contact with diphtheria, these thirty years, and the therapeutical measures which I have learned to appreciate and to practice. Thus I shall not touch upon the large number of panaceas which have ascended like rockets and never were seen again.

[1] A paper read at the meeting of the Philadelphia County Medical Society, May 23, 1888.

Diphtheria is a contagious disease. Severe forms may beget severe or mild forms. Mild cases may beget mild or severe cases. There is probably no spontaneous origin of diphtheria, any more than there is a spontaneous origin of cholera or scarlatina. What has been called follicular amygdalitis (or "tonsillitis") is diphtheria in many, perhaps most, instances. It is seldom dangerous to the patient, because the tonsils have but very little lymph communication with the rest of the body. But the diphtheritic variety of follicular amygdalitis is also contagious. This mild variety is that from which adults are apt to suffer. It made me proclaim the warning that there is as much diphtheria out of doors as there is in doors; as much out of bed as in bed. With this variety the adult is in the street, in business, in the schoolroom, in the railroad car, in the kitchen and nursery. With this variety, parents while complaining of a slightly sore throat, kiss their children. Wherever it is suspected, it ought to be looked after. Where it is seen it ought to be isolated and treated, less perhaps for the sake of those who are sick, than of those who are in serious danger of being infected. This is the more necessary, as this form is apt to last long and give rise to repeated attacks. But it is not only the mild variety which is liable to last long. Serious, undoubted cases are also apt to last for weeks, and some of them months. As long as they do persist they are contagious.

These reminiscences and quotations from former writings must justify the preëminent place I claim for preventive treatment.

Those sick with diphtheria, severe or mild, must be isolated. If barely possible, the other children ought to be removed from the house. This can but rarely be done in the homes of the poor, in the densely populated districts. A great charity is still waiting for

its consummation, viz., that of erecting buildings, dormitories, and playrooms for those who ought to be temporarily exiled from their infected homes. A suggestion of mine, before the New York State Medical Society in its meeting of 1882, resulted in the erection of the Willard Parker Hospital of New York, for the benefit of those suffering from scarlatina and diphtheria. The erection of a sufficient number of temporary homes would be a still greater blessing to the poor, and a greater protection to the public at large. If it be impossible to send the well children away, let them remain outside the house, in the air, as long as feasible, and with open bedroom windows during the night, in the most distant part of the house; during the winter on a lower floor. Their throats must be examined every day, and their rectal temperatures taken by the mother, so that the physician may be called on the occurrence of but slight changes. The few minutes spent in this way are amply repaid by the safety they may accomplish. The attendants upon cases of diphtheria must have no intercourse with the well children; though a brief visit of the physician may not render him sick, or dangerous to others, a long exposure affects him or a nurse to a greater or less degree.

The well children of a family in which there is diphtheria, must not go to school or church. Schools must be closed when a number of pupils have been attacked; or better still, when there is an epidemic, though it may not yet have affected the school children to a great extent; the teachers ought to be taught how to examine throats, and directed to do so every morning, and send home those children who are suspected.

When an attack of diphtheria has made its appearance, it is well enough to examine the hygienic condition of the house with its deteriorating influences on the general health of the inmates, and to look after the source of the case in the persons of friends, attendants, and help. A family with children ought to insist upon the occasional inspection of the throats of their servants; those with chronic pharyngeal catarrh must not be hired. A seamstress, or laundress coming for an occasional day's work, sick nurses, children's nurses, and cooks, ought to be examined from time to time, the more so, the more such people are inclined to conceal slight troubles, for obvious reasons. The opportunities for infection are so numerous that it is impossible to sail absolutely free from it. It is easy to imagine how many cases of diphtheria are liable to be disseminated by teachers, shopkeepers, restaurant keepers, barbers, and hairdressers.

In times of an epidemic, every public place, theatre, ball-room, dining-hall, and tavern ought to be treated like a hospital. Where there is a large conflux of people there are certainly many who carry the disease. Disinfection ought to be enforced at regular intervals. In this respect I can but repeat what I said in my treatise (p. 172) and Pepper's *Cyclopædia* (I. 697). Public vehicles must be treated in the same manner after a suspicious case has been carried; that it should be so when a case of small-pox has happened to be conveyed in them, appears quite natural. Livery stable keepers who would be anxious to destroy the germ of small-pox in their coaches, must learn that diphtheria is as dangerous a passenger as variola, and what is correct in the case of a poor hack, is more so in a railroad car, whether emigrant or Pullman. I have seen many cases coming to and leaving the city in them. They ought to be thoroughly disinfected in times of an epidemic at regular intervals, for the highroads of travel have always been those of epidemic diseases. Still, can that be accomplished? Will not railroad companies resist a plan of regular disinfections, because of its expensiveness? Will there not be an outcry against this despotic violation of the rights of the citizen, the independence of the money bag? Certainly there will be, exactly as there was when municipal authority commenced to compel parents to keep their children from school when they had contagious diseases in their families, and when small-pox patients were arrested because of their endangering the passengers in a public vehicle, or taken to a fever hospital for the protection of their neighbors. In such cases it is not society, or the State, that tyrannizes over the individual, it is the individual that endangers society.

To what extent the infecting substance may cling to surroundings, is best shown by the cases of diphtheria springing up in premises which had not seen diphtheria for a long time, but had not been interfered with; and best, perhaps, by a series of observations of auto-infection. When a diphtheritic case has been in a room for some time, the room, bedding, curtains, and carpets, are infected. The child is getting better, has a new attack, may again improve, and is again stricken down. Thus I have seen them die; but also improve immediately after being removed from that room or house. If barely possible, a child with diphtheria ought to change its room and bed every few days.

To other rules of protection and disinfection, both private and public, including the prohibition of public funerals, I allude only for the purpose of referring to the admirable rules published in its *Bulletin* No. 10, of September 6, 1879, by the National Board of Health, and copied in my treatise on diphtheria, New York, 1880, and my article on diphtheria in Pepper's *System of Practical Medicine*, vol. I. p. 698.

Prevention can accomplish a great deal for the individual. Diphtheria will, as a rule, not attack a healthy integument, be this cutis or mucous membrane. The best preventive is, therefore, to keep the mucous membrane in a healthy condition. Catarrh of the mouth, pharynx and nose must be treated in time. Many a chronic nasal catarrh, with big glands round the neck, requires sometimes but two or three regular salt-water injections (1:130) into the nose, and gargling if the children be large enough to do so. The addition of one per cent. of alum will often be found useful. This treatment, however, must be continued for many months, and may require years. Still there is no hardship in it, and no excuse for its omission. The nasal spray of a solution of nitrate of silver, 1:500 or 1000, will accelerate the cure, and not infrequently has a treatment which was considered obsolete when I was young, been of great service to me. It consists in the internal administration of the tincture of pimpinella saxifraga. It is certainly an efficient remedy in subacute and chronic pharyngitis and laryngitis. I generally give it to adults, diluted with equal parts of glycerine and water, a teaspoonful of the mixture every two or three hours, with the proviso that no water must be taken soon after.

Large tonsils must be resected in times when there is no diphtheria. During an epidemic every wound in the mouth is liable to become diphtheritic within a day, and such operations ought to be postponed if feasible. The scooping of the tonsils, for whatever cause, I have given up since I became better acquainted with the use, under cocaine, of the galvano-cautery. From one to four applications to each side, or to the post-nasal space, are usually sufficient for every case of enlarged tonsils or lacunar amygdalitis. It is advisable to cauterize but one side at a time, to avoid inconvenience in swallowing afterward, and to burn from the surface inward. Cauterization of the centre of the tonsils may result in swelling, pain, and suppuration, unless the cautery is carried entirely to the surface; that is to say, the scurf must be on, or extend to the surface. Another precaution is to apply the burner cold, and heat it *in situ*.

Nasal catarrh and proliferation of the mucous and submucous tissue may require the same treatment, but in my experience the cases which require it are less frequent than cases in which the tonsils need correction. The presence of glandular swellings round the neck must not be tolerated. They and the oral and mucous membranes affect each other mutually. Most of them could be avoided if every eczema of the head and face, every stomatitis and rhinitis resulting from uncleanliness, combustion, injury, or whatever cause, was relieved at once. A careful supervision of that kind would prevent many a case of diphtheria, glandular suppuration, deformity or phthisis.

For its salutary effect on the mucous membrane of the mouth, chlorate of potassium, or sodium, which is still claimed by some to be a specific, or almost so, is counted by me amongst the preventive remedies. If it be anything more, it is, in a case of diphtheria, an adjuvant. It exhibits its best effects in the catarrhal and ulcerous condition of the oral cavity. In diphtheria it keeps the mucous membrane in a healthy condition, or restores it to health. Thus it prevents the diphtheritic process from spreading.

Diphtheria is seldom observed on healthy, or apparently healthy, tissue. The pseudomembrane is mostly surrounded by a sore, hyperæmic, œdematous mucous membrane. Indeed, this hyperæmia precedes the appearance of the diphtheritic exudation in almost every case. The exceptions to this rule consist of those cases in which the virus may take root in the interstices between the normal tonsillar epithelia, pointed out by Stoehr but a few years ago. Indeed, many cases of throat disease occurring during the prevalence of an epidemic of diphtheria, are but those of pharyngitis which under favorable circumstances may develop into diphtheria. These throat diseases are so very frequent during the reign of an epidemic, that in my first paper on diphtheria (August 11 and 18, 1860, *Amer. Med. Times*) I based my reasoning on 200 cases of genuine diphtheria, and 185 of pharyngitis, without a visible membrane.

These cases of pharyngitis, and those of stomatitis and pharyngitis accompanied by the presence of membranes, are benefited by the local and general effect of chlorate of potassium. The surrounding parts being healthy or returning to health, the membrane remains circumscribed. The generally benign character of purely tonsillar diphtheria, which

is apt to run its full course in from four to six days, has in this manner contributed to secure to chlorate of potassium the reputation of being a ready, *the*, remedy in diphtheria. The dose of the salt must not be larger than 15 grains (1 gramme) for an infant a year old, not over 20 or 30 (1.5–2.0) for a child from three to five years old, in the twenty-four hours. An adult must not take more than 1½ drachms (6 grammes) daily. These amounts must not be given in a few large doses, but in repeated doses and at short intervals. A solution of one part in sixty will allow a teaspoonful every hour, or half a teaspoonful every half hour in the case of a baby one or two years old.

It is not too late yet to raise a warning voice against the use of larger doses. Simple truths in practical medicine do more than simply bear repetition, they require it. For though the cases of actual chlorate of potassium poisoning are no longer isolated, and ought to be generally known, fatal accidents will still occur even in the practice of physicians. When I experimented on myself, with half ounce doses, thirty years ago, the results were some gastric, and intense renal irritation. The same were experienced by Fountain, of Davenport, Iowa, whose death from an ounce of the salt has been impressively described in Alfred Stillé's *Materia Medica*, from which I have quoted it in my treatise on diphtheria. His death from chlorate of potassium induced me to prohibit large doses as early as 1860. In my contribution to Gerhardt's *Handbuch der Kinderkrankheiten*, vol. II, 1877, I could speak of a series of cases known to me personally. In a paper read before the Medical Society of the State of New York in 1879 (*Medical Record*, March 15), I treated of the subject monographically, and alluded to the dangers attending the promiscuous use of the drug, which has descended into the ranks of domestic remedies; and, finally, in my treatise (New York, 1880) I collected all my cases, and the few then recorded by others. Since that time the recorded cases have become quite numerous, and but a few days ago a few new ones were related before the Practitioners' Society of New York. The facts are undoubted, though the explanations may differ. The probability is that death occurs from methæmoglobinuria produced by the presence of the poison in the blood; though Stokvis, of Amsterdam, has tried, by a long series of experiments, to fortify my original assumption that the fatal issue is due to acute nephritis.

The attempt at forming indications for the treatment of patients with diphtheria—I refuse to say treatment *of* diphtheria—based upon preconceived or acquired ideas as to the nature and causes of diphtheria, are all futile. We know that many cases are undoubtedly of local origin; but there are those in which we require no other proof for its original infectious character than the fact that there is a period of incubation. But all that is indifferent, in view of the fact that the cases we are called upon to treat are, as a rule, or have become, both local and constitutional. It is these we have mostly to deal with.

There is no better proof of the non-existence of a specific in diphtheria than the fact that the pharmacopœia has been exhausted to find one, and new remedies, legitimate and illegitimate, are being recommended all the time as panaceas. While there are certain indications resulting from the characteristics common to all, every case must be treated on general principles, which must be applied to the prominent individual features. When there is a high temperature in the beginning, it requires all the tact of a good physician to judge of the advisability of reducing it by antifebriles, such as sponging, warm bathing, cold bathing, antipyrine, antifebrine, or the subcutaneous use of the carbamide of quinia. Convulsions may demand active treatment, such as chloroform inhalations, or chloral hydrate internally, or in the rectum. Vomiting, or other cerebral symptoms, may ask for liquids, or smaller or larger doses of opiates. A very quick and feeble pulse may require a few large doses of a heart stimulant, digitalis, strophanthus, or sparteine in the very beginning.

Renal complications are frequent, and occur at an early time. The majority of cases terminate favorably; in some a large amount of albumin will be eliminated in the course of a few days and disappear shortly. But whether or not your individual case will be of that nature, you do not know, and in time of danger nothing must be taken for granted. Milk or farinaceous diet, plenty of water, or, better, Poland, Bethesda, Seltzer, Appollinaris, or Vichy, warm bathing, warm feet, a few good doses of calomel, a number of hourly or two-hourly small doses of opium—which are better than those of digitalis—and nitroglycerine, will often prove beneficial. If a diffuse nephritis, such as is more frequently met with in scarlatina, be the result, it impairs the prognosis and requires further treatment conducted on general principles.

To what extent local treatment, if it be possible to employ it, is effective, can best

be seen on external diphtheritic surfaces, such as the cutis denuded by vesicatories, the inguinal regions sore with intertrigo, the vagina, circumcision wounds, or tracheal incisions. I have tried almost everything which has been recommended for these conditions, but am most pleased with the effect of iodol, or iodoform powdered, or one part with eight or ten of vaseline. Powders of subnitrate of bismuth, boric acid, or salicylic acid with fifteen or twenty-five times its quantity of starch, have not given me the same satisfaction.

The treatment of diphtheritic conjunctivitis requires also nothing but local measures. It consists in the application of small ice-bags, or iced cloths which must be changed every few minutes, and the frequent instillation of a saturated solution of boric acid, with or without atropia.

The local treatment of the pseudo-membranes of the fauces is a subject of great importance. To look upon them as an excretion which needs no interference, is incorrect. If it were possible to remove or destroy them, it would be a great comfort; but they can be reached only in certain places, and just in those in which they do least harm. Pseudo-membranes on the tonsils are the least dangerous, for their lymph communication with the rest of the body is very scanty. Thus almost all forms of tonsillar diphtheria are amongst the most benign, at least as long as the process does not extend. Most cases of the kind run their mild course in from five to seven days, and it is just these which have given rise to the many proposals of tearing, scratching, cauterizing, swabbing, brushing, and burning. There are cases which do not show the harm done. The fact is that neither the galvano-cautery nor carbolic acid, nor tannin and glycerine, nor perchloride or subsulphate of iron can be applied with leisure and accuracy to the very membrane alone, except in the cases of very docile and very patient children. In almost every case the surrounding epithelium is getting scratched off or changed, and thus the diphtheritic deposit will spread. Besides, the membrane of the tonsil is changed surface tissue, as it always is wherever the epithelium is pavement, and not deposited upon the mucous membranes from which it might be easily detached. Whatever is done must be accomplished without violence of any kind. If nasal injections be found advisable they can be made to wash the posterior pharynx and the tonsils sufficiently, so as to render the special treatment directed to the throat absolutely useless. Besides, it is easier, and meets with less objection, and gives rise to less exhaustion than the forcible opening of the mouth. This is of very great importance, as I shall show in connection with the local treatment of the nasal cavity. Where it is possible to make local applications without difficulty, the membrane may be brushed with tincture of iodine several times daily, or a drop of rather concentrated carbolic acid. Of powders I know only one, the application of which is not contraindicated, viz., calomel. Even this may irritate by its very form. Everything dry irritates and gives rise to cough or discomfort. Whatever has, besides, a bad taste or odor, such as sulphur, iodoform, or quinia, must be abhorred.

For the purpose of dissolving membranes papayotin, or papain, has been employed. It is soluble in twenty parts of water, and may be injected, sprayed, or brushed on. I have used it in greater concentration, in two or four parts of water and glycerine, in the nose, throat, and through the tracheotomy tube, in the trachea. One of the irrepressible drug manufacturers and advertisers pushes the claims of some modification of the drug, which he calls papoid. For the same purpose trypsin is preferred by others. The mode of its applications appears to be the reverse of indifferent. Only lately, I have seen in the practice of one of our best known practitioners, papayotin applied in powder, which resulted in constant irritation of the throat, while the patient otherwise was convalescent. The pharyngeal hyperæmia and slight exudation disappeared when mild alum washes were substituted.

Steam.—Its inhalation is useful in catarrh of the mucous membranes, and in many inflammatory and diphtheritic affections. On mucous membranes it will increase the secretion and liquify it, and thus aid in the throwing off of the pseudo-membranes. Its action is the more pronounced the greater the amount of muciparous follicles under or alongside a cylindrical or fimbriated epithelium. Thus it is that tracheo-bronchial diphtheria, so-called fibrinous bronchitis, is greatly benefited by it. Children affected with it I have kept in small bath-rooms for days, turning on the hot water, and obliging the patient constantly to breathe the hot clouds. Several such cases I have seen recover with that treatment. Atomized *cold* water will never yield the same result. Nor have I seen the patent inhalers do much good. Still, where the surface epithelium is pavement rather than cylindrical, and but few muciparous follicles are present, and the

pseudo-membrane is rather immerged in, and firmly coherent with, the surface—for instance, on the tonsils and the vocal cords—the steam treatment is less appropriate. On the contrary, moist heat is liable in such cases to favor the extension of the process by softening the hitherto healthy mucous membrane. Thus it takes all the tact of the practitioner to select the proper cases for the administration of steam, not to speak of the judgment which is required to determine to what extent the expulsion of air from the steam-moistened room or tent is permissible.

Steam can be properly mixed with medicated vapors. In the room of the patient water is kept boiling constantly over the fire-place, provided the steam is prevented from escaping directly into the chimney; or on a stove (the modern self-feeders are insufficient for that purpose and abominations for every reason); or over an alcohol lamp if we cannot do better, but not on gas if possible, because of the large amount of oxygen which it consumes. Every hour a tablespoonful of oleum terebinthinæ, and perhaps also a teaspoonful of carbolic acid, is poured on the water and evaporated. The air of the room is filled with steam and vapors, and the contact with the sore surfaces and the respiratory tract is obtained with absolute certainty.

The secretion of the mucous membranes is sometimes quite abundant under the influence of steam, but still is, like that of the external integuments, increased by the introduction of water into the circulation. Therefore, drinking of large quantities of water, or water mixed with an alcoholic stimulant, must be encouraged. Over a thoroughly moistened mucous membrane the pseudo-membrane is more easily made to float, and to macerate.

It was for this purpose that pilocarpine, or jaborandi, was highly recommended. Guttmann recommended it as a panacea in all forms of diphtheria. There is no doubt that the secretion of the mucous membrane is vastly increased by its internal application, and by repeated subcutaneous injections of the muriate or nitrate of the alkaloid, but the heart is enfeebled by its use. I have seen but few cases in which I could continue the treatment for a sufficient time. In many I had to stop it because after some days of persistent administration I feared for the safety of the patients. Thus, as early as at the meeting of the American Medical Association at Richmond, eight years ago, I pointed out the exaggerations in the statements of Guttmann. There will be but exceptional cases in which pilocarpine will be tolerated long enough to do good. It is one of the remedies with which we may cure our case and will kill our patient.

Diphtheria of the nose is apt to terminate fatally unless energetic treatment is commenced at once. This treatment consists in persevering disinfection of the mucous surface. The disinfecting procedure must not be omitted long because of the general sepsis resulting from rapid absorption from the surface, which is supplied with lymph ducts and small, superficial blood-vessels to an unusual extent. Disinfectant injections must be continued every hour, for one or more days. If they are well made, the consecutive adenitis, especially that about the angles of the lower jaw, is soon relieved and the general condition improved. But there are cases in which the lymph bodies are not the main gates through which constitutional poisoning takes place, but the blood-vessels alone. In the incipient stage of such cases the discharge from the nostrils is more or less sanguineous; in them the blood-vessels, thin and fragile, carry the poison inward with great rapidity.

In a few cases injections are unsuccessful. They are those in which the whole nasal cavity is filled with membranous deposits to such an extent as to require forcible treatment. Sometimes it is difficult to push a silver probe through it. That procedure may be repeated, the probe dipped in carbolic acid, or wrapped in absorbent cotton moistened with carbolic acid of 50 or 90 per cent. After a while injections alone will suffice. But now and then the development of pseudo-membranes is very rapid, a few hours suffice to block the nostrils again, and the difficulty is the same.

[TO BE CONTINUED.]

REMOVAL OF THE UTERINE APPENDAGES AS A REMEDIAL MEASURE.[1]

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It is not expected that the profession will be taught anything new on this important subject, but the recital of this remarkable case, with the very satisfactory results, may stimulate others to consider more seriously and thoroughly the propriety of extending to a large class of sufferers the benefits of a surgical operation as a remedial measure where medicine has hopelessly failed to give more than temporary and unsatisfactory relief.

[1] Read before the Medical Society of the State of Pennsylvania, June 6, 1888.

In September, 1887, Dr. Bushong, of New Holland, Lancaster county, Pa., consulted my brother, Dr. M. L. Davis, Medical Director of the Hospital, in relation to the admission of Miss B. W., who had been a patient of his for several years, with a view of having Battey's operation performed, if thought advisable. After her admission my attention was called to her case in consultation, when the following history was elicited:

Age, 21; date of admission, October 18, 1887; menstruated at 10½ years, with pain; father living, age, 51, always healthy; mother died at 51 from disease of the heart, following rheumatism; brothers living, 4 (28, 26, 22 and 13 years of age), all in good health; brothers dead, 3 (one 5 years old, of diphtheria, one 16 months old, of scrofula, and one infant, cause unknown); sisters living, 8 (35, 33, 20, 24, 29, 17, 14 and 11 years of age), all in good health but two; sisters dead, 1 (5 years old), of diphtheria. Paternal grandfather died at 76, of old age; paternal grandmother died at an advanced age, cause of death unknown. Maternal grandfather died at 52, of consumption; maternal grandmother died at 71 years of age, of consumption. The sister, 33 years old, has heart trouble, the result of rheumatism, and the one 24 years old suffers with dysmenorrhœa, though not in an aggravated form. The mother of the patient and four of her father's sisters were sufferers with the same disease. In the Spring of 1879 she received an injury from a direct blow in the region of the perineum, which was followed by pain, swelling and incontinence of urine; and the latter was followed in a few days by retention, the patient frequently not urinating for 24 or 30 hours. In September of the same year she fell a distance of thirty-five or forty feet, injuring the abdomen, back and side, and was confined to her bed for some time. In January, 1880, she again had a fall of twenty feet, which produced displacement of the uterus and confined her to bed for several weeks. In May of the same year she was struck a violent blow between the shoulders. In January, 1881, she contracted measles, recovery from which was slow, and was followed by an aggravation of the uterine symptoms. Shortly after partial recovery, rheumatism set in and was severe for two weeks; this was followed by paralysis of the right arm, leg, and right side of the face.

Dr. Bushong, her attending physician at the time, regarded the cause of the paralysis as reflex. Improvement began in about two weeks. She has had two similar attacks since, and recovered from them in about the same length of time. In March, 1881, at one of her menstrual periods, she had convulsions which were violent in form, and returned daily for three weeks. Since that time (about six years), they have occurred at nearly every menstrual period, and at the last one preceding the operation, I was called in consultation with the Staff Physician, who was apprehensive that death would take place at any time, as she had been in an apparently comatose condition for over twenty-four hours. The condition was not of that hysterical variety so often met with in uterine diseases and general prostration, but was of a hystero-epileptoid character, and at one time she remained in an unconscious condition for three weeks, from which she could not be aroused even by the strongest safe electric current. As before stated, menstruation appeared in 1879, when she was ten and a half years of age, and about the time that the injury to the perineum was received. During the first and second periods, the latter following the former in one month, she suffered severe pain, which continued without any remission as long as the flow lasted. After this, menstruation did not occur for six months, and then was accompanied with much more suffering than on the two former occasions, and continued for several days after the discharge ceased. From this time on the periods were irregular, sometimes recurring every month for three or six months, again being absent for a like period. The pain and general nervous debility gradually increased with each menstrual epoch, until, for the last four years, she became a helpless invalid, bedridden and dependent upon those around her for everything, and dependent upon her faithful physician even to relieve the bladder morning and evening.

From the date of the first appearance of her menses until the day she was operated upon, she was confined to her bed in all, five years, seven months and thirteen days. All means had been exhausted for her relief, short of removing the ovaries. In 1883, 1885 and 1887 she was with difficulty taken to a college hospital in Philadelphia, where forcible dilatation of the os and urethra was performed. The therapeutics of dysmenorrhœa had all been gone through with, and for the prolapsus a long list of unique-shaped pessaries had been worn. All without benefit.

Operation:—My brother, Dr. M. L. Davis, assisted by the writer, Dr. Bushong and the Hospital Staff, did the operation by abdominal incision in the median line, all antiseptic precautions being observed in detail. Both ovaries and tubes were found diseased, and bound down with the products of oft-repeated

subacute inflammations. Strong silk ligatures were applied as close to the uterus as was possible, the diseased organs removed and the pedicles dropped. The abdominal wound was closed with silk sutures, penetrating as near as possible to the peritoneum without injuring that membrane, and supported with strips of plaster. A soft, carbolated cotton pad, secured with a well-fitting bandage, completed the operation, which lasted but half an hour. The uterus was placed in, as near as possible, its normal position, and kept in blace by a soft antiseptic tampon, the object peing to get rid of the prolapsus by adhesion of the stumps to the peritoneum, at the point where the ovaries were enucleated. The patient was placed in bed on her back, sufficient anodynes were given to relieve pain, the bladder was relieved by the use of the catheter every four or five hours, and recovery was complete and rapid, without one untoward symptom. The abdominal wound healed by first intention, not even one drop of pus forming around the sutures. Since her admission to the hospital she menstruated every four weeks, the time for the fourth period coming on three weeks after the operation, at which time she suffered some pain, but was able to bear it without the use of anodynes—an unknown occurrence in the history of her long list of sufferings since she first cast an ovum, in 1879. When the second and third periods came round she had but little if any pain, simply languor. On the day of the operation she weighed about seventy-five pounds; to-day she weighs one hundred and twenty. The uterus is in almost its normal position. The catheter is no longer needed, although there is at times some slight irritability of the bladder, which will, no doubt, in the absence of the monthly congestions, yield to the power of nature to heal itself when not interfered with. I doubt very much if there is a physician within the sound of my voice who can not recall more than one case occurring in his practice in years gone by, in which this comparatively simple and safe operation would have cured more than one of his patients suffering with a complication of diseases of the pelvic organs—one in which the remedies usually prescribed tended only to aid the disease in undermining the nervous system. Some may take exception to the terms simple and safe, as applied to the operation. When using these terms I desire to be distinctly understood as referring to the operation by abdominal section, which, in my humble opinion, has more claims for simplicity and safety than either of the other methods chosen by such distinguished gynecologists as Dr. Goodell, of Philadelphia, with fifty-three operations during the past year and but a single death, and Dr. W. Gill Wylie, of New York, with one hundred and fifteen operations, and only six deaths. Considering the deplorable condition of this class of patients, as a rule, the percentage of recovery is so large that it seems to me to be malpractice to allow a well-marked case for the operation to suffer on without offering the only means of relief.

TUBERCULAR MENINGITIS.

BY G. W. GARRISON, M.D.,

UTICA, OHIO.

On Thursday, April 12, 1888, I was called to see D. S., fourteen months old, and found the little patient feverish and quite restless, with her gums swollen and her bowels torpid. I diagnosticated her condition to be a mild catarrhal fever. I gave her a mercurial laxative every two hours in a teaspoonful of syrup of wild cherry bark, with half a drop of tincture of aconite and two drops of tincture of gelsemium for the first twenty-four hours.

On the morning of the 13th, the patient was much the same. She had had several alvine evacuations during the night; her pulse was 120; her temperature, 103°; her respiration, short and frequent. She was rather disposed to be dull and stupid. I continued the former treatment with fluid diet, etc.

April 14.—The child's condition was much the same; she had less fever, but was still dull and drowsy, although not so irritable as before; her pulse was 110; her temperature, 102°. I continued the former treatment, but omitted the mercurial, as it was acting too much on the bowels. On the morning of the 15th, the symptoms remained much the same as before, and I could not understand why the disease was so hard to break up. For the next four days there was no apparent change in her condition for the better, and I became somewhat anxious about my little patient's recovery.

On the afternoon of the 20th, the mother reported the child's bowels to be again torpid, and requiring more attention than formerly. Vomiting and coughing would ensue immediately on arousing from sleep, and she had been very stupid and sleepy during the past twenty-four hours. Her eyes were partially closed when she fell into a nap, and her head was thrown back

(opisthotonus). About midnight she had a convulsion, and after that the vomiting became more frequent.

At this visit I ordered cold applications to the head, and:

℞ Potassii bromidi.....gr. j
Potassii iodidi.....gr. ¼
Misce. Sig. Give in a teaspoonful of wild cherry syrup every 3 or 4 hours.

I also ordered an enema of oil, one tablespoonful, and turpentine, 20 drops, to move the bowels.

The family history of this child may be related here. On the paternal side, some two or three children had died when quite young, and two grown brothers, aged 35 and 37 years, had died recently of tuberculosis. On the maternal side, the grandmother had died of consumption some half dozen years or so ago. So after treating my little patient for several days without any improvement, I was convinced that I was in an error in the first diagnosis, and informed the parents of my opinion, and suggested a consultation. This being agreed to, we sent for Dr. A. T. Speer, of Newark, O., on the morning of April 21. When we visited the child together in the afternoon, the child roused up and looked brighter than I had seen her look for several visits past. She played with Dr. Speer's watch and keys, but when we made a close examination she became fretful and nervous; and while we were in an adjoining room consulting, she began dozing, and threw her head back, half closing her eyes; but soon she became startled at something and roused up, coughing and crying as usual, and then began to vomit; then she fell back into a sleep again. Dr. Speer fully concurred in my opinion as to the pathological condition.

Our treatment now was: Internally, syrup ferri iodidi, five drops every four hours, alternating with gr. 1-40 of calomel and gr. j. of sugar of milk, rubbed up together; locally:

Iodoformi.....℥j
Adipis.....℥vij
M. Ft. unguent.
Sig.—Apply to entire scalp every eight hours, and cover with oiled silk and a night-cap.

Her diet was strictly liquid.

On the morning of April 22, there was a decided improvement for the better. Opisthotonus was no longer observable, the vomiting was less frequent, the cough much the same, and had she not been disturbed with a teaspoon coming at her statedly, I believe she would not have vomited any more. I discontinued the powders at this visit, and ordered one-eighth of a grain of iodide of potash to be given in a tablespoonful of water, *ad libitum*, or as often as every two hours, if she did not call for a drink. I continued the topical application of iodoform as before, for I believed that it had dissipated about all the alarming cerebral symptoms. On the 23d, the patient seemed much better, and was more rational than at any of my former visits. The same treatment was continued. This condition continued much the same at my visits on the 24th, 25th, 26th and 27th, until the morning of the 28th, when I noticed an irritable hacking cough, followed by a peculiar groan. On examining the lungs I discovered some crepitation of the left lung, posteriorly and inferiorly. I now ordered the iodoform and lard to be applied all over the thorax every eight hours, with the same precautions as when applying it to the head—where it had been discontinued for three days previously. This local treatment was kept up for three days, with calomel gr. 1-20, morph. sulph. gr. 1-100, sugar of milk gr. j, dry on the tongue every three hours. This had a very good effect in relieving all the difficulty and shortness of breathing, so that the little patient from this time (April 30 to May 2) made a rapid recovery, with all her mental faculties intact—something which it is not often a physician's good fortune to witness when having such an unfavorable family history as in this case.

I am no enthusiast over new remedies, and not prone to adopt modes of treatment other than those laid down in our text-books; but the suggestion of Dr. Speer, to use iodoform to the scalp, was well supported by the reflection that iodoform is one of our very best alteratives, and the recollection of a number of articles in the medical periodicals on the efficacy of iodoform in cerebro-spinal troubles, appearing within the last year. I attribute to its effects the restoration of our little patient to health. On May 2, after three weeks close attention, the patient was regarded as recovered, which was a great blessing to a young and happy father and mother, while I was almost as grateful as they.

TREATMENT OF WOUNDS OF THE PALMAR ARCH WITH SHOT-BAG PRESSURE; A CASE.

BY MADISON REECE, M.D.,
ABINGDON, ILLINOIS.

The editorial in the REPORTER for June 2, brings to mind three cases of wounds of the palmar arch which strikingly support the position of the editor in regard to the treat-

ment there advocated. The difficulty to be encountered, I apprehend, is in producing bearable pressure. This was the trouble which M. Bosquet feared, and failed to meet. In the following case I give the method by which I overcame this difficulty:

September 5, 1879, Mrs. H. cut the superficial palmar arch of the left hand, on the radial side, while opening a can of fruit. The bleeding was considerable, and was arrested for a time with compression applied by the husband. The next day the hemorrhage recurred to such an extent that a physician was called. The bleeding was again arrested with pressure; but as it was badly borne it was relaxed, and during the night profuse and exhausting hemorrhage took place. By this time considerable swelling and infiltration of the tissues of the hand and wrist had also taken place, and the attending physician, believing it necessary to tie the arteries at the wrist, I was sent for in consultation.

Upon arriving at the patient's home, I found the doctor had remained all night, for the reason that the amount of pressure applied caused so much pain that it had to be frequently removed, and then the bleeding would begin immediately. The patient was a spare woman, anæmic, and very nervous.

It required no great amount of pressure to control the hemorrhage, and I suggested and put into operation the following device: A small bag four inches in length and two and a quarter inches in width was made and filled with bird-shot. The forearm was placed on an elevated pillow, and the shot-bag placed lengthwise on the wrist over the arteries. The pressure was well borne, giving no pain or uneasiness. The wound began to heal rapidly, and in four days the weight was removed, and no tendency of the bleeding to again show itself was manifested.

The attending physician was agreeably surprised at the result, as he was thoroughly convinced that nothing but tying the arteries would answer. I have treated three cases of wounds of the palmar arch in this way, with the same happy results. In other cases, in which the ends of the arteries could be easily secured, I have tied both ends; but where there is secondary hemorrhage and swelling, with infiltration of the parts, as in the case above related, I believe the equable, diffused, and easily adjustable pressure made by a bag of shot, will secure the best results.

—An association of colored physicians exists in Texas under the name of the Lone Star Medical Association. Its second annual meeting was held at Austin, May 14 and 15.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Stated Meeting, May 23, 1888.

The President, J. Solis-Cohen, M.D., in the chair.

Dr. Joseph O'Dwyer, of New York, read by invitation the following paper on the use of

Intubation Tubes.

[Before reading his paper Dr. O'Dwyer exhibited tubes with a metallic attachment to replace the epiglottis in swallowing, one of them being so arranged with a spring that the finger might be introduced behind it as an extractor.

In order to illustrate through how small a space breathing can occur, he exhibited a specimen from a case in which there had been no choking of voice or other sign of laryngeal involvement.

Many fear that the tube will slip through into the trachea. A tube was exhibited *in situ*, in a three year-old larynx, showing that this accident cannot occur if the proper size of tube for the age be employed.]

The testimony of tracheotomists from the time of Bretonneau, has been uniformly in favor of canulas of large calibre. I have failed to find a single dissenting opinion on this question, yet very few have given any reason in support of their conviction, or entered into any arguments whatever on the subject, probably because they considered that none were necessary, as it appears so very reasonable that the artificial channel should approximate as nearly as possible to the normal lumen of the air-passages. I will refer to a few of the authorities on this subject before giving the reasons that led to the adoption of laryngeal tubes of so much smaller calibre than those generally used for the trachea.

If a large opening be preferable in one situation it certainly is in the other, the same argument applying to both. Bretonneau, for some reason which I have not been able to find, came to the conclusion that the canulas which he first devised were not large enough, and laid down the rule that "The artificial conduit should always have at least the normal diameter of the glottis of the subject." Trousseau endorsed this as an excellent precept, which should never be forgotten. Steiner says that as large a canula as possible should be used. The first point of importance insisted on by West, as influencing the result

of tracheotomy in croup, is the use of a large canula.

The author of the article on croup in Holmes's *System of Surgery*, says that "as a general rule, both openings in the canula should be sufficiently large to admit as much air as would pass through the rima glottidis in health."

The following is from Reynolds's *System of Medicine:* "No tube with less than a quarter of an inch diameter is sufficient to carry on respiration. At a year old such a tube cannot be introduced into the trachea; it would not be tolerated at two years old, so that at these ages some other means must be looked for to secure a passage for the air."

This author then discusses the question as to whether the want of success with tracheotomy in very young children is not due to the inability to secure a large enough opening. In answer to such assertions as the above, it is only necessary to state that the diameter of the lumen of the trachea at a year old is scarcely a quarter of an inch, and, furthermore, an adult can breathe comfortably while at rest through an opening of this size. I have at present a man under my care who has been wearing a canula in the trachea for the last seven months, the bore of the inner tube being exactly one-fourth of an inch in diameter. During part of this time he was obliged to breathe exclusively through the artificial opening, but then the least exertion, such as walking across the room, was sufficient to induce dyspnœa. Nature supplied this patient, who is of large stature, with a breathing-tube at least seven-eighths of an inch in diameter, and the surgeon substituted one having a breathing capacity of something less than one-twelfth of this. In other words, the area of a cylinder seven-eighths of an inch in diameter is a little more than twelve times that of one a quarter of an inch in diameter.

Had the surgeon who operated in this case placed himself on record, he must have taken extreme ground in favor of small canulas. Trousseau advocated larger canulas than were first used, on the ground that in some cases the improvement that at first succeeds the operation of tracheotomy soon gives place to a return of the dyspnœa, and attributes this result to the inadequate size of the canula employed, which does not provide for the permanent admission of a sufficient quantity of air. In illustration of this fact he says: "Place a quill in the mouth, and, closing the nostrils, endeaver to breathe entirely through it; at first you breathe easily enough, but soon your respiration becomes laborious, and at length you are fain to throw away the quill, and with open mouth once more to fill the lungs completely."

I have tried this experiment with a quill, the diameter of which was three-sixteenths of an inch, and could breathe through it for over five minutes without much discomfort, yet it represents in round numbers only the twenty-second part of the area or capacity of my trachea, estimating the diameter of the latter at seven-eighths of an inch. If we now construct a canula in the same ratio for a child of five years, the diameter of whose trachea is one-third of an inch, it gives a calibre of three-thirty-fourths of an inch in diameter, an opening about as large as the head of an ordinary sized pin. Trousseau's illustration, therefore, fails to sustain his argument in favor of larger tubes, as it is certain that canulas as small as this were never used. A more reasonable explanation of the return of the dyspnœa before the lapse of sufficient time for the extension of the disease, would be the entrance of blood, or the accumulation of secretions, because it occurred in only some cases, while if due to the inadequate size of the canula it should have occurred in all.

In my early experiments with intubation, the tubes had about the same calibre as those generally used for the trachea, but in order to avoid injury to the vocal cords, which I feared more than anything else, it was necessary to give them the oval or elliptical, instead of the cylindrical form. A few of these early forms I here show you. There was ample room, both in the glottis and trachea, for tubes of this size and shape. But I was not then aware of the hour-glass constriction that exists just below the vocal bands until it was demonstrated by the presence of ulceration through the whole thickness of the mucous membrane, corresponding to the long diameter, in every case in which the tube was retained for any considerable time. This defect could be remedied in only one or two ways, viz., either by diminishing the long diameter at the expense of the lumen of the tube, or by giving it the cylindrical form. The latter, by increasing the pressure on the vocal cords, would endanger their integrity, and I therefore adopted the former, and, as a result, the calibre of the tubes as at present constructed is probably less than half the original dimensions. The small calibre, consequently, was a matter of necessity, and not of choice, and if the larynx would tolerate no larger without injury, any further argument, as far as intubation is concerned, would

be useless. But from the fact that I have failed to find any ulceration at the points above indicated from the tubes as now made, I am satisfied that the cutting down process was carried further than necessary, and if demonstrated that a larger opening would give better results, this could be obtained without danger to the vocal cords by an increase of the transverse as well as the antero-posterior diameter. The bore of the smallest tube while still in the cylindrical form, which is intended for infants of one year and under, is exactly one-eighth of an inch in diameter. When we consider the size of the trachea at the same age, the disparity is not very great, and still less when compared with the subglottic division of the larynx, which is the narrowest portion of the breathing tube. This part of the larynx being completely surrounded by cartilage, is not subject to any variations in the normal condition, while the chink of the glottis may be greater or less, according to the position of the vocal cords.

I have found that in the adult the diameter of the lower division of the larynx is from one-eighth to three-sixteenths of an inch less than that of the trachea, which reduces the breathing capacity about one-third. I have not made any similar measurements in children, but by comparing a section from the cricoid cartilage placed beside one from the trachea, it does not appear that the area of the former is more than one-half that of the latter; in other words, the disparity is greater in children than in adults. In the preceding calculations I estimated on the size of the trachea, simply because it was more convenient, but it is evident that in order to arrive at correct conclusions, we must compare the lumen of the canula with that of the infraglottic division of the larynx, because the trachea would conduct air to and from the lungs just as well were it no larger than its mouth. But, as I have already stated, it was not from any such comparisons with the normal calibre of the larynx that the tubes have reached their present dimensions, but from noting the results of pressure on the intensely inflamed and infiltrated tissues as found post-mortem.

After an experience with tubes of various sizes in over two hundred cases of croup, besides other forms of stenosis of the larynx in children, I am fully convinced that, as at present constructed, they afford ample room for carrying on the respiratory function in the most perfect manner. When the disease is confined to the larynx and upper portion of the trachea, it is not an uncommon experience, after the paroxysm of coughing that immediately succeeds intubation has subsided, to find the little patient breathing so quietly and imperceptibly that it is sometimes difficult to convince the mother, who has returned to the room after an absence of fifteen or twenty minutes, that her child is still living. Such complete freedom of respiration would be impossible were the opening too small. When the struggle for breath has continued long enough to produce extreme exhaustion, together with more or less atelectasis and congestion of the lungs, this perfect relief does not occur. The same is true after the partial asphyxia induced by prolonged or repeated attempts to insert the tube. Such cases sometimes never rally, although air enters the lungs in the freest possible manner.

If any dyspnœa whatever remain for any considerable time after intubation, or if the respiration be much above the normal in frequency, it indicates the presence of some complication or extension of the disease below the tube. The fact that on several times removing a tube from the larynx I have found its calibre considerably reduced by firmly adherent secretions, when there had been no dyspnœa to indicate it, is good evidence that there is more room than is actually required for the free entrance and exit of air. Physiology teaches us that the muscular system is the great consumer of oxygen, and that when this system is at rest the consumption of oxygen is reduced to a minimum. It has been estimated that as much oxygen is consumed during one hour of active exercise as would suffice for four hours in a state of repose, with food, and for six hours without food. On purely physiological grounds, therefore, if only one-fourth or one-sixth of the amount of air is required in a state of rest, a canula bearing this proportion to the normal lumen of the air passages should afford ample room for the perfect performance of the respiratory function without the least effort whatever.

There would be no point in trying to determine through just how small a fraction of the normal lumen of the air-passages it is possible to carry on respiration effectually, if the only object to be accomplished by the artificial channel were to allow the free passage of air to and from the lungs. There would then be no room for argument, as there could be no objection to having the canula many times larger than necessary for this purpose, for such exists in the normal condition. I will add further, that were there no abnormal secretions to be gotten rid of, there would still be no reason for difference of opinion on this question. The only ground left for argument, therefore, is the manner in which the

machinery concerned in the removal of secretions is modified or injured by a canula in the larynx or trachea. The mechanism of coughing, as I understand it, is simply getting as much air into the lungs as possible, condensing it, and allowing it to escape suddenly, on the same principle as the air-gun. To accomplish this, the glottis is firmly closed, coincidently with spasmodic contraction of the expiratory muscles, until the imprisoned air is sufficiently compressed, not only to give it power to project any offending substance before it like the ball from an air-gun, but also to increase the friction between it and the lining membrane of the air-passages to such a degree as to scrape off, so to speak, secretions that may be adherent.

Considerable condensation, with great velocity of the expired air are, therefore, necessary to give the maximum expulsive power. The latter without the former would accomplish nothing, because the same volume of air can be driven through the open or half-open glottis just as rapidly as in the act of coughing, without the least power to remove a particle of mucus even from the larynx, much less from the bronchial tubes. This can be demonstrated by trying to cough while retaining the vocal cords in the expiratory position—the lack of power resulting solely from inability to compress the air to any appreciable extent. Coughing through a canula is identical with this act when performed with a partially open glottis, and the only means left of subjecting the air to any condensation whatever is the much shorter time occupied in expelling it through the same space by which it more slowly entered.

An excellent and forcible illustration of this argument, and one the mechanism of which is identical with that of coughing, is the familiar act of blowing the nose. There is little if any ability to remove secretions from this organ without first reducing the nostrils to a small fraction of their normal calibre, or by momentarily producing complete occlusion, as in closing the glottis, until the air is sufficiently condensed to force the secretions out with it. Very little power can be developed even by closing one nostril and forcing all the air through the other, if normally patulous. If secretions can be removed more effectually from the air-passages through a canula of the dimensions advocated by the authorities already quoted, for the same reason it should be easier to remove accumulations from the nose without compressing the nostrils. I claim, therefore, that while the artificial opening must be large enough for the perfect performance of the respiratory function, the power to expectorate is still further diminished, and in exact proportion to its increase beyond this limit.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, May 28, 1888.

The President, LAURENCE JOHNSON, M.D., in the chair.

The Sanitary Condition of the Croton River Water-Shed.

DR. JOHN C. PETERS made the report, which was verbal, and was for the purpose of inducing action on the part of the State Senate Investigating Committee to put an end to the nuisances existing on the Croton watershed, which were polluting the drinking water of the citizens of New York. Dr. Peters said the committee appointed by the County Society last year had been unable to get the city officials to take action in abating the nuisances, and there was now much greater necessity for it since the railways and land speculators were offering inducements to people to settle in the vicinity of the lakes from which the city got its water. About three years ago the population of the Croton watershed was twenty thousand; there were about nineteen hundred privies, six hundred barn yards, five cemeteries, several milk factories, over a thousand cattle and horses, etc., the sewage from which entered the Croton water. The comparative purity of the waters of Berlin, London, Boston and New York was estimated from the fact that the water of Berlin contained 99 bacteria to the cubic centimeter; that of London 44, and that of Boston 43, while that of New York contained 526. It was possible, through the sewage contamination taking place at the source of the Croton waters, for infection to occur at any day with the germs of typhoid fever, scarlet fever, etc. Indeed, the speaker suggested that it was not impossible that some of the numerous cases of scarlet fever and diphtheria which had for some time constantly prevailed in the city, had their origin in the Croton waters.

Acute Articular Rheumatism in the Nursing Infant.

DR. HENRY KOPLIK read a paper showing that the existence of acute articular rheumatism as an independent affection in the nursing infant is scarcely recognized by many writers. He gave the histories of two cases which had come under his own observation, one being that of an infant six months old, which had had pain, redness, and swelling in the feet and hands for five days before he saw

it. When he was called the temperature was 105.5° F., and the other symptoms were still present. On the eleventh day the rash of scarlet fever made its appearance. The tenderness of the affected joints subsided completely after eight weeks, and the recovery was complete. He thought the rheumatism and scarlet fever were, considering that the one preceded the other for so many days, quite independent of each other. The second case was that of a child nine months old, the feet and hands being affected, the temperature rising only to 102.5°. In neither case was there synovitis or cardiac complication. In the diagnosis Dr. Koplik excluded rheumatoid affections and obscure affections of the bones and joints, such as sometimes occurred in syphilis, rachitis, peri-articular abscess, osteomyelitis, etc.

The society then adjourned until the fourth Monday in September.

Hospital Notes.

THE HYGIENE OF THE BREASTS; TREATMENT OF PUERPERAL NIPPLE LESIONS, AND MAMMARY ENGORGEMENT, AT THE PHILADELPHIA LYING-IN CHARITY.

BY CHARLES P. NOBLE, M.D.,
SENIOR ASSISTANT PHYSICIAN.

Hygiene of the Breasts.

In view of the importance of the function which the breasts perform after child-birth, great care should be taken to have them in good condition for their work. A special indication for prophylactic care is the fact that an unhealthy state of the skin covering the nipples is a predisposing cause of nipple lesions during the puerperium. Many patients at this institution are unmarried primiparæ, and among this class diseases of the breast are most common. From motives of shame, many of them lace until their admission, compressing their breasts and nipples as well as their waists. Among hospital patients, habits of cleanliness are not very common, or their ablutions are limited to the face, neck, and hands. Hence, especial care on the part of the physician is necessary for these cases. In addition to the general baths which all waiting women receive, they are directed to wash the breasts with soap and water once or twice daily—on rising and retiring—taking care to remove collected secretions; also to apply a dilute spirit lotion, as cologne water, bay rum, or whiskey. There can be no question that cleanliness promotes the normal activity of the skin, or that alcoholic lotions, by slightly hardening the epidermis, tend to prevent maceration and erosions of the nipples in the beginning of lactation. The hardening process should not be carried too far, lest it destroy the suppleness of the skin, and thus defeat its object. When the nipples are more or less depressed, directions are given that they be gently elongated by traction with the thumb and fore-finger for a few minutes, twice daily. In these, and all other cases, the clothing is so arranged as neither to confine the breasts nor the abdomen. Where depression is marked, it not uncommonly happens that elongation is not secured by these measures. Nothing is then left but the use of the nipple shield during lactation, or it may be necessary in some cases to wean the infant. No reflex effects upon the womb have been observed.

Treatment of Puerperal Nipple Lesions.

Aside from ante-partum prophylaxis, much can be done in preventing these painful and really serious conditions. Sore nipples are usually caused by a constant moist condition, leading to maceration, exfoliation, and excoriation; or, by traumatism inflicted by the infant in suckling. When the infant is vigorous and the milk supply scanty, ecchymoses are apt to form on the crown of the nipple from the powerful suction, and when, as commonly happens, the epithelium subsequently exfoliates, an erosion or a fissure results. Hence, the nipples are carefully dried after each nursing, being first washed with a saturated boric acid solution, or a weak solution of borax. Also, until lactation is well established, it is not considered advisable to put the infant to the breast more frequently than once in four hours. Success in the treatment of sore nipples largely depends on beginning treatment early. For erosions, the compound tincture of benzoin is applied to the dried nipple with a camel's hair pencil—one or perhaps two coats after each nursing. Unless improvement follows in a few hours, Needham's nipple shield is used. (A practical point in the use of the shield is this: the nipple furnished is made of light rubber, and is somewhat stiff. If one of black rubber, such as are kept in the shops for nursing-bottles, be substituted, the child will have less difficulty in nursing, as the black rubber is softer and more pliable.) Nursing from the affected breast is allowed only at longer intervals. If true ulceration

is present, a solution of silver nitrate (ten grains to the fluid ounce) is applied, and nursing temporarily suspended. Cases of extensive ulceration have not been met with. For fissures, the solution of nitrate of silver is used, or the pointed, solid stick. The fissure may then be covered with collodion, or iodoform-collodion. But rest is what is required, and unless the remedies yield prompt results, nursing must be allowed only at longer intervals, or suspended for twelve or twenty-four hours. The shield does not give as much comfort in fissures of the base as in lesions of the summit of the nipple. A layer of cotton over the breast and a well-applied bandage is used to control milk secretion while rest is secured. All applications are washed from the nipple before the child is allowed to nurse. Cases of inflammation of the entire nipple structure have not occurred. All the cases at the Charity have yielded kindly to these measures. Mastitis has rarely followed, and in but one case has abscess resulted. The danger of infection by microbes should ever be borne in mind, and were greater care taken of nipple lesions mastitis would be a less common complication of the puerperal state.

Treatment of Mammary Engorgement.

While the occurrence of milk fever is no longer admitted, it is true that in certain puerperæ, symptoms are present about the third day which are caused by the establishment of lacteal secretion. In these cases the thermometer registers under 100° F., and usually does not exceed 99.4°. The pulse is but slightly if at all quickened. The patient is restless and perhaps thirsty. The breasts are swollen and somewhat painful, the pain perhaps extending into the axillæ. The condition is one of mammary engorgement, with constitutional irritation. The indications are to lessen milk secretion and hyperæmia of the breasts, and allay the constitutional symptoms. For this purpose the patient is put upon dry diet; is given a saline purge; full doses of sodium bromide, as much for its sedative effect as for its supposed action on secretion of milk; perhaps, also, the iodide of potassium. Locally, castor oil is used. It is smeared over the breasts (not rubbed or kneaded in, for such rubbing, stroking or kneading only increases hyperæmia and milk secretion, (*ubi irritatio, ibi fluxio*), and they are then covered with a piece of soft flannel or cotton wool. A bandage best relieves the sensation of dragging, and puts the breasts at rest. The "roller" is not necessary; besides it interferes with nursing and requires the woman to remove her clothing and sit up during its application. A modification of the bandage used in the Boston Lying-in-Hospital, described in Worcester's book on Nursing, has been employed. It is applied as follows: A bandage about six feet long and three inches wide is doubled, and reversed on itself in the centre—this forms a V. To the apex of the V, a strip of bandage is pinned, forming a Y. The leg of the Y is passed under the back, the apex of the original V being applied to the outer side of the left breast. The arms of the Y are then carried across the chest, one above, the other below the breasts, and brought together upon the outer side of the right breast. They are fastened together and to the leg of the Y (the strip which was passed under the back), by a single pin. These two pins control the bandage. These can easily be arranged so that the breasts are lifted toward the median line, and slightly compressed. The process is completed by passing a strip around the neck and fastening the ends to the bandage, first named, over the sternum; or a strip may be passed over each shoulder and fastened to the encircling bandage at the back and front. This elevates both breasts toward the shoulders. Added comfort is gained by laying cotton wool or a folded napkin over the breasts before the bandage is applied. After a little experience, it is easily and quickly done without disturbing the patient. By the removal of a pin, one breast may be exposed for nursing. Under this method of treatment, doubtless aided by the course of nature, the symptoms usually subside within twenty-four hours, and the patient in the meantime is made much more comfortable. In no case has mastitis resulted.

—At a meeting of the Academy of Sciences in Paris, April 30, 1888, M. Bimar announced the results of some investigations which he had made in regard to the distribution of the spermatic artery in man. The spermatic artery in man is distributed to the testicle only after division in the substance of the albuginea, and at the internal surface of this membrane. Its ramifications penetrate the substance of the testicle at different points on its surface and describe loops in its interior with their convexity directed toward the corpus Highmorianum, and from this smaller branches are distributed to the lobules. This mode of distribution is analogous to that seen in all mammals, especially in the ruminants.—*Gazette Hebdomadaire*, May 11, 1888.

PERISCOPE.

Cancer of the Stomach Rupturing Externally.

Among some clinical observations published in the *Charité Annalen*, 1887, O. Fraentzel reports a case of cancer of the stomach, which ruptured externally. From this account it appears that in the pit of the stomach there was a distinct round tumor, which was soft to the touch and painful upon pressure. Somewhat to the right of the xyphoid process was a prominent spot which was tightly stretched and showed fluctuation. A needle was thrust into the fluctuating part of the tumor, and one and three-fourth ounces of a thick, cloudy fœtid fluid, mixed with air bubbles, were evacuated; the fluid was not of a distinctly foul odor, and it contained pus, fat and detritus. Subsequently under an anesthetic, the little fistula was divided, and entrance gained to a cavity the size of a small apple, which was filled with ichorous, foul smelling pus. Coughing expelled air which stank like carrion. At the autopsy a tumor the size of a hen's egg was found in the region of the pylorus. The interior of this tumor had broken down in suppuration, and in some places where the decay reached to the periphery of the tumor there was a direct communication with the abscess.—*Deutsche Medizinal-Zeitung*, April 16, 1888.

Penetrating Wounds of the Abdomen.

At the meeting of the Surgical Scciety of Paris, April 25, 1888, M. Le Fort made some remarks upon penetrating wounds of the abdomen. He thought it important to distinguish in such cases the point at which perforation occurred, for the prognosis varies very much according to the organs wounded. In illustration of the statement that wounds of the stomach are infinitely less grave than those of some other organs, he mentioned a case in which two butcher boys had been amusing themselves, after dinner, fencing with knives. One of the boys had his stomach perforated in such a way that the abdominal wound gave vent to some vegetables and meat which the injured boy had swallowed some moments before. The next day, and even during the four hours following, particles of food were discharged from the wound. Nevertheless recovery was perfect. M. Le Fort then went on to say that one of his students in a thesis upon this subject has collected eighty-eight cases of wounds of the stomach, of which number there were seventy-five recoveries. In fifty-two cases there was no surgical operation. In the twenty-three remaining cases, the interference was insignificant, except in a case of Larrey's in which the wounds in the stomach and abdomen were so large that a true laparotomy was done, followed by sutures. Le Fort thinks it is a mistake to say that the absence of peritonitis as a sequel to an abdominal wound is an indication that there actually is no perforation. Examples to the contrary, he says, are numerous and manifest.

From a series of ninety-five experiments made upon the cadaver, he concludes that wounds below the umbilicus are always perforating, and the frequency of perforation diminishes with the height of the seat of injury.

He agrees with M. Reclus that a distinction should be made between wounds made with pistol-balls, and those made with large projectiles. In the former case a plug of mucous membrane may possibly frequent extravasation. In wounds with balls of small calibre, refraining from operation should be the rule. Laparotomy should be done only when accidents arise, for it is an operation which is long, difficult and dangerous.—*Bulletin Médical*, April 29, 1888.

Acute Iodine Poisoning.

In the *Therapeutic Gazette*, April, 1888, Dr. W. O. Culpepper, of Barbadoes, reports the case of a colored boy 11 years old, upon whose leg two drachms of some preparation of iodine had been applied on Tuesday, January 17, about 9 P.M., for a skin affection. The application removed all the skin from above the knee to below the ankles upon both legs, leaving a raw surface as though it had been scalded. The same night, and on Wednesday, the child's suffering seemed to be local; but on Wednesday night he was seized with headache, pain in the back over the kidney, pain over stomach and bowels and bladder, and did not appear to have passed water. These symptoms became worse on Thursday, and there was also some diarrhœa and vomiting along with great thirst. The boy says he passed water once, the mother said that he tried several times but did not pass any.

On Thursday night the pains seemed to have reached their greatest intensity, and hiccough came on. The slightest movement induced vomiting and hiccough, and there was constant thirst and ineffectual attempts at urination. Constant spitting was stated to have been present at this time. Cn

Saturday morning Dr. Culpepper was sent for. He found the child vomiting, purging, hiccoughing, crying continually for water and bringing it up as soon as swallowed. No loss of consciousness, and no pain complained of except in the head and over the bladder. Temperature 98.8°, pulse rapid, but its force good. The skin was dry, and so were the tongue and buccal mucous membrane. The pupils seemed to be normal. The child complained of being giddy when his head was lifted, and he was said to have fainted away several times. The abdomen was flat, and there was no urine in the bladder; priapism existed. During Saturday he somewhat improved. Iodine was found in the feces. On the next day he grew worse; stools contained mucus and blood. His symptoms steadily became worse, the pains in the abdomen returned, but the intellect remained clear. He died at 4 A.M., Monday morning. His mother raised him to let him move his bowels, and soon after he passed away quietly and without pain; before death his stools were said to have become almost pure blood. His lungs were apparently unaffected.

State of the Gastric Juice in Febrile Diseases.

L. Gluzinski, in a communication to the *Deutsches Archiv für klin. Medicin*, Bd. XLI, endeavors to determine what change the function of the stomach undergoes during fever, and what the cause of the dyspepsia is. He examined fifteen patients with a view of deciding this question. The method of experimentation was to aspirate and test the contents of the stomach, after the administration of the white of one egg. The results obtained in typhus fever, pneumonia and typhoid fever, are as follows: 1. During the entire continuance of the fever, with the exception of the concluding stage of typhoid fever, the gastric juice contains no hydrochloric acid. 2. The juice has no digestive power, either in the organism or outside of it—contains no peptone. 3. After the addition of hydrochloric acid good artificial digestion is brought about, which shows that there was enough pepsin in it. 4. With the subsidence of the fever a gastric secretion having digestive power is furnished.

In chronic febrile diseases, such as phthisis and pleurisy, there was, however, a normal gastric juice during the fever. It seems, therefore, that under similar conditions the state of the gastric juice in febrile diseases is not so much influenced by the increased temperature as by the kind of infection.—*Deutsche med. Wochenschrift*, May 17, 1888.

Influence of the Bitters upon the Function of the Stomach.

N. Reichmann publishes a communication in the *Zeitschrift für klin. Medicin*, Bd. XIV, entitled an experimental investigation concerning the influence of the bitters on the function of the stomach in health and disease. His investigations were limited to the human stomach. In his tests he employed centaury, trifolium, gentian, quassia, and wormwood. Cold infusions (12 parts to 200) of these bitters were given without food, and before or during a test-meal of distilled water and albumen. The result showed that after the administration of these bitters, which all act alike, the secreting power of the stomach is less than after the taking of distilled water. But when the drug is eliminated from the stomach, the secretory apparatus is excited to increased activity. If food and the infusion were swallowed at the same time, both the secretory and the motor function of the stomach were impaired.

Of course the practical lesson to be learned from this is, that bitters should be used only in cases in which the gastric juice is diminished, and that they must be taken about half an hour before food.—*Deutsche med. Wochenschrift*, May 17, 1888.

Microörganisms of the Male Urethra and of Normal Urine.

Lustgarten and Mannaberg (*Vierteljahresschrift für Dermat. und Syph.*, vol. XIV, p. 905) removed, by means of a previously heated platinum spoon, portions of the secretion of the mucous membrane of the normal urethra. Among the great variety of bacterial forms found, there were two of special diagnostic interest. One was a bacillus morphologically identical with the bacillus tuberculosis, and the other a diplococcus in no wise distinguishable from the gonococcus of gonorrhœa. The bearing of this discovery upon the examination of urine for tubercle bacilli in cases of suspected tuberculosis of the genito-urinary organs is obvious. For such examinations they recommended catheterization with a sterilized catheter, since it was found by culture experiments that urine so obtained, not having passed through the urethra, was in most cases free from microörganisms.—*American Journal of the Medical Sciences*, April, 1888.

Fluctuation in the Amount of Hydrochloric Acid in the Stomach.

P.W. Burschinsky (*Wratsch.*, No. 47, 1887) experimented upon fourteen thoroughly healthy men in the following manner: About

nine o'clock in the morning they received tea with wheat bread, then about two o'clock in the afternoon the white of a hard-boiled hen's egg. One hour after the latter a sufficient quantity of the contents of the stomach was aspirated, and the estimation of the acid made. Then they had dinner, and about nine o'clock again had tea with wheat bread. About eleven o'clock they went to bed, were wakened about two o'clock and again received the white of egg. One hour later they were again wakened and the contents of the stomach aspirated. For the estimation of the free acid he employed Günzberg's reagent—an alcoholic solution of phloroglucine with vanilline, of whose utility he had previously convinced himself by numerous trials. His results are as follows: 1. The quantity of acid in the gastric juice is less at night than in the day. 2. The weakening of the acid reaction of the juice goes hand in hand with the weakening of the reaction for free hydrochloric acid. 3. Phloroglucine vanilline is an unusually accurate reagent for the free hydrochloric acid of the gastric juice.—*Deutsche med. Wochenschrift*, May 17, 1888.

Dry Mouth.

At the meeting of the Clinical Society of London, March 17, 1888, Dr. W. B. Haddon read a paper on dry mouth, or suppression of the salivary and buccal secretions. The patient was a woman, 65 years old, who had suffered from no affection which could throw light on her present condition. There was no history of family paralysis, or of the prolonged use of belladonna. Her mouth began to get dry some months previous to observation. The tongue was red, devoid of epithelium, cracked in all directions, like crocodile skin, and absolutely dry. The mouth generally was dry, and the mucous membrane smooth, shiny and pale, with a few patches of injection. There was also deficiency of moisture at the back of the pharynx. The tonsils were natural. The salivary glands, as far as could be made out, were natural in size. Common sensation of the inside of the mouth was unimpaired; but the sense of taste was retarded in consequence of the deficiency of moisture. When the mouth became moist later on, the saliva was found to be slightly acid, and to exert no action on a solution of starch. During this time the mouth had been getting dry, perspiration had notably diminished, and the lachrymal secretion was arrested. The patient received much benefit from the use of jaborandi. A case of similar nature under the care of Mr. Hutchinson was alluded to, and one under the care of Dr. Rowlands, of Liverpool, was communicated by the author of the paper. In conclusion, it was suggested that this condition of dry mouth was due to some disorder of the nervous apparatus. — *Lancet*, March 17, 1888.

Treatment of Varices by Ligature of the Internal Saphenous Vein.

After a brief review of the results obtained by Schee, Annandale, Madelung, Langenbeck, Fry and others, in extirpating varices, M. Ed. Schwartz details (*Rev. gén. de Clin. et de Ther.*, February 2, 1888), three cases in which he tied the saphenous vein at two or three different places, dividing it between ligatures, the indications being in one case a very painful varicose swelling at the inner border of the knee; in another, an extensive ulcer; in the third, great varicose enlargement of the leg. In the one just mentioned, the venous tumor, having become hard and firm from thrombosis, was enucleated three days after the ligation of the vein. Eight months later there was no serious return of trouble. The ulcer, which was two by two and a-half inches in size, and had persisted for six months, resisting other treatment, healed in eight days. Five months after operation, the cure remained complete. The third case did not report for observation, but the immediate result was a complete cure.

M. Schwartz believes with Langenbeck that these cases, as in the operative treatment of hernia, a long time must elapse before a radical cure can be claimed, but thinks it safe to say that the multiple antiseptic ligature of varices, and even their extirpation, when they form painful tumors, is strongly indicated, especially when the means usually adopted have proved ineffective and the patients are not much beyond middle age.—*American Journal of Medical Sciences*, April, 1888.

Instantaneous Cold.

The *Phar. Centralblatt*, 1887, p. 532, says that under this name a convenient substitute for outward application of ice is made by Boschlin, of Montpellier. It consists of felting made from cotton, jute, cotton-waste or China-grass, saturated with a mixture of several salts (nitrate of ammonium, chloride of ammonium, nitrate of potassium and sulphate of sodium) which upon being wet with water produces a low temperature.—*American Journal of Pharmacy*, April, 1888.

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THE DISEASE OF THE EMPEROR OF GERMANY.

After many vicissitudes of belief and statement it seems at last to be decided that the disease of the former Crown Prince, and late Emperor of Germany, was cancer of the larynx. This furnishes a sad confirmation of the opinion which we have always expressed in the REPORTER as to the nature of this malady, which has given rise, for the past year, to so much discussion. It is now asserted, or intimated, that Sir Morell Mackenzie has all along known that his patient had cancer of the larynx, and that he played the part of a wise and good man in concealing this fact from the world. This may be so; but the supposition would place in an unenviable light the man who could put to shame the best surgeons of Germany with a lie, and could treat so treacherously the enterprising medical journals in this and other countries which paid for his personal reports of the case, and confidently accepted and adopted his assurances that there was no sufficient evidence that the disease was cancer.

The dilemma between this and an error of diagnosis is an awkward and unfortunate one, indeed, and we cannot see much to choose between its two horns. Meanwhile, we feel as strongly as we have always felt that the straightforward course is generally the best one; and we shall feel this still more strongly, if it turns out—as it has been intimated that it may—that concealment of the nature of the Crown Prince's malady led to his mounting the Imperial Throne without authority of law, and involves the validity of every act he performed as Emperor.

RHEUMATIC PNEUMONIA.

In the *Lancet*, May 5, 1888, DR. W. B. CHEADLE has an interesting account of an outbreak of rheumatic pneumonia which occurred in St. Mary's Hospital, London. We gather from his paper that there was a series of six cases, four of which occurred in June and July, 1887, and the others soon afterwards, and that the symptoms were so similar in all the cases as to deserve special notice. In the first place, in every case except one the pneumonia followed an attack of pericarditis, which was itself a complication occurring in the course of the inflammatory rheumatism. In one patient, it is true, no pericarditis was noted; but, Dr. Cheadle very justly says: as the patient had twice before had attacks of rheumatic fever, the pericardium might have become adherent, and so no friction sounds have been produced; or the pericarditis may have existed before and been undetected. The patient died with double pneumonia, but unfortunately no autopsy could be obtained. Now, in the five cases in which the pneumonia followed an attack of pericarditis, it came on after a definite interval. This interval was, in two cases, six, and in two others, seven days after the first sign of pericarditis. In the remaining case the pericarditis existed fully developed at the time of the patient's admission, and the pneumonia appeared two days later, so that in all probability the length of the interval between the two complications was very near that known to have occurred in the others. It may be noted in passing, that in all of the six cases there was valvular disease of the heart; in four cases it was of long standing and of great gravity, while in the remaining two cases mitral regurgitation developed during the attack of rheumatism.

Not only was the time of appearance of the pneumonia peculiar, but it differed from ordinary pneumonia in its location and in its chief physical signs and symptoms. For example, it is well known that ordinary pneumonia is more common upon the right side than upon the left; but in the outbreak under discussion it invariably appeared first in, and chiefly affected, the lower lobe of the left lung. In three of the cases the right lung became similarly affected, but at a later date. Again, both cough and expectoration were entirely wanting. The pneumonia seemed to be fully formed when first discovered; even the crepitant râle of the initial stage was wanting in one case. It was recognized by the usual physical signs—dulness, blowing breathing, and increased vocal fremitus. Finally, the pneumonia which occurred in these cases differed from ordinary pneumonia in ending by lysis, not by crisis.

As these cases of rheumatic pneumonia occurred in patients who were in the hospital, and could therefore be closely observed, the cause to which Dr. Cheadle attributes the outbreak is entitled to much consideration. It is simply this: that the free ventilation in the wards of the hospital, made almost necessary by the extremely hot weather, had been sufficient to chill these rheumatic patients, who, as is well known, are peculiarly susceptible to cold. While it may be granted that draughts of air may have been the immediate occasion of the attacks of pneumonia, it is not too much to say that a predisposing cause of them may be recognized in the changed condition of the patient, a condition produced by the effect of the rheumatic poison on the blood. It is a significant fact that the pneumonia should have occurred in every case first on the left side; it is not improbable that the pleura became affected first by extension of inflammation from the pericardium, and that the inflammation of the lung tissue followed that of the pleura. In many of the cases which have been reported by other observers, there has been rather severe congestion, with undoubted apoplexy in some of the cases, as proved by the autopsy, than true pneumonic consolidation. But the cases here mentioned seem to have been true pneumonia, the cause of which, as we have already intimated, may have been the same as the cause of the rheumatism.

SACCHARINE.

This interesting chemical product, which attracted so much attention when its properties were first announced, has been the subject of continued investigation in order to determine whether or not it has any therapeutic value. The result of these investigations seems to indicate that it is to be regarded as a condiment rather than as a medicament.

An elaborate paper in the *Gazette Hebdomadaire*, May 18, 1888, by M. Charles Eloy, traces its history from the year 1879, when it was first isolated by Fahlberg, of New York, to the present time, and shows its physiological properties to be almost *nil*. It does not appear to modify any of the functions of animals to which it is administered, and it escapes from the body in the urine without interferring with any of its normal constituents. It, however, has a tendency to prevent fermentation, and to delay the metamorphosis of starch into glucose by the action of ptyaline or of pancreatine. Urine and feces containing saccharine do not ferment or become putrid as rapidly as those which are without it.

The hope that saccharine would prove of value in the management of *diabetes mellitus* has not yet been confirmed by experience; for in a number of cases it has soon excited disgust or given rise to symptoms of dyspepsia. It seems also, at times, to cause purgation. For this reason, saccharine must be used with discretion in cases of diabetes, and its use must be discontinued if it gives rise to gastric disturbance. If indigestion is a marked feature of diabetes, the use of saccharine seems to be absolutely contra-indicated.

In regard to its antiseptic properties, nothing of importance is yet decided. The natural hope that an antiseptic which is so largely eliminated from the body by the kidneys would prove of value in the treatment of cystitis, has not come to fruition as yet; and in no other respect has saccharine been shown to be superior to other and better

known antiseptics. As an addition to distasteful medicines the results obtained have also been disappointing; and there is some reason to fear that when added to sour wines, to sweeten them, it is to be regarded as an adulteration.

These conclusions in regard to saccharine need not be regarded as final; for further observation may reveal new ways in which it may be used in commerce or in medicine; but as yet it cannot be said to have won a very high position in either of these fields.

THE MANAGEMENT OF HOSPITALS FOR THE INSANE.

We alluded briefly, in our issue for June 9, to the action of the Pennsylvania Medical Society on the resolution of Dr. Hiram Corson to urge the State Legislature to separate the administrative control of the State Hospitals for the Insane from their medical management. This action seemed to be prompted by a feeling that a sort of of personal attack was intended upon the medical superintendents of three of the State Hospitals, and a desire to avoid the appearance of sanctioning such an attack. That no such personal attack was contemplated seems to be clear from the expressions of Dr. Corson and of those who share his opinions in regard to the principles involved in his resolution; but the medical superintendents who would be affected by its passage opposed it, because its animus might easily be misunderstood, and also because they do not share Dr. Corson's opinions in regard to the way in which hospitals for the insane should be managed.

After this resolution was disposed of, and at a subsequent meeting of the Society, another, of a thoroughly prudent character, was introduced by Dr. E. A. Wood, of Pittsburgh, calling for the appointment of a committee of thirteen, to include the medical superintendents of all the State Hospitals for the Insane, to investigate the question raised by Dr. Corson and to report to the Society. The resolution was adopted unanimously, and it is to be hoped that it will bring about a satisfactory solution of a very important question. Those who would regret to see any reflections cast upon the superintendents of the Warren, Danville and Harrisburg hospitals cannot but acknowledge that the question of separating the medical from the administrative functions of their superior officers is one which demands careful consideration, and that it ought to be decided without favor as well as without prejudice.

We have no doubt that the work of the committee representing the Pennsylvania Medical Society will go a great way toward determining this matter, and we expect that it will be of great service to the Legislature when they are next called upon to fix the slates of the medical officers of State hospitals for the insane.

ANTIPYRINE AND SEA-SICKNESS.

Not long ago there was an animated discussion at the Academy of Medicine of Paris introduced by a communication of M. Ossian Bonnet, who maintained that antipyrine was the best remedy for sea-sickness. A few days later M. Aubert suggested that the departure of the French delegates to the French Association for the Advancement of Science, to be held at Oran, Algeria, would be a very good occasion upon which to try the efficacy of the drug. We now learn from the *Bulletin Médical*, May 20, 1888, that M. Etienne Rollet, one of the Lyon internes, went with the delegates to Oran, and, not being attacked with sea-sickness himself, was able to study carefully what took place among his companions. It is amusing to learn that the passengers, who repaired in large numbers to the Congress, set sail at four o'clock in the afternoon, and at six o'clock, when at least sixty had taken antipyrine, only four remained at table to finish their dinner! This was as true of those who took the antipyrine two or three days before embarking, as of those who deferred taking it until their arrival on board the vessel. On the return from Oran, M. Rollet was able to prove that antipyrine has no action upon sea-sickness. As an impartial observer he concluded that antipyrine could not be counted on, when administered by the stomach in the usual

doses, either as a means of treatment during the attack or as a preventive of sea-sickness.

If M. Rollet's opinion is confirmed by subsequent observers, no more can be said than that antipyrine has failed where almost every drug in the pharmacopœia had been tried and found ineffectual. We may still hope that antipyrine will prove useful in some cases in which other drugs have failed, and come to be counted as one of the drugs which may with propriety be tried in the treatment of sea-sickness. The susceptiblity of different persons to this disorder varies so widely, and the reasons for this variation are so little understood, that it is not to be expected that any one drug will be be found equally serviceable in all cases.

NEPHRECTOMY.

The papers and discussions at the recent meeting of the Pennsylvania State Medical Society on the subject of nephrectomy were of the greatest interest and value. The paper of Dr. John B. Deaver, published in the last number of the REPORTER, lays down clearly the indications for this operation in cases in which the kidney is the seat of morbid growths, and the demonstration, by Dr. Mordecai Price, of a case in which he successfully removed the right kidney for a pistol-shot wound passing through the liver and into it, was a most striking proof of what can be accomplished by courageous and discreet surgery.

An operation which has now been performed more than four hundred times cannot be said to be any longer on trial; and it seems to be clear that the successful performance of it may be regarded as a question of skill in diagnosis and dexterity in practice.

Fortunately for surgeons and for mankind, the matter of diagnosis is not usually obscure in cases of penetrating wounds of the abdomen, and a laparotomy, if properly executed, is a certain and far from dangerous means of clearing it up. In regard to morbid growths, a careful study of Dr. Deaver's paper will show that a diagnosis of their seat and nature—so far as the kidneys are concerned—is not so difficult as one might suppose, and the question as to the propriety of nephrectomy is not hard to decide. There may be surgeons who would operate more freely than Dr. Deaver advises, but we think it may be said to be quite safe to follow the rule which he has laid down.

WASHING OUT THE STOMACH AFTER OPERATIONS UPON THE MOUTH.

At the recent meeting of the Pennsylvania Medical Society, Dr. Goodwillie, of New York, made, by invitation, some very interesting remarks in regard to his mode of operating for the cure of hare-lip. In the course of these remarks he stated that it is his custom to wash the stomach out after operating, in order to empty it of the blood which often enters it during operations of this kind. This procedure, as he described it, is simple and easy to execute, and not only frees the stomach of a useless burden, but very materially lessens the probability that vomiting will occur. As vomiting after operations upon the mouth is a very disagreeable occurrence, and endangers the success of what has been attempted, it must be regarded as a decided advantage to prevent it, and the method used by Dr. Goodwillie deserves the careful consideration of all surgeons.

SMOKERS' VERTIGO.

At a meeting of the *Academie de Médicine*, May 15, 1888, M. Lagneau read a report upon a communication made a month before by Dr. Decaisne upon the vertigo observed in smokers. While confirming the general opinion that excessive smoking may give rise to vertigo attributable to tobacco, M. Lagneau called attention to the fact that vertigo due to congestion of the brain may be confused with tobacco vertigo, if it occurs in the person of a smoker.

As most medical men are addicted to smoking, it may give them some comfort to think, when their heads swim, that this is not caused by their indulgence, but chargeable to over work. Still, if they overwork themselves at the right end of a pipe or cigar, we would suggest that a little rest at this point might relieve the congestion which annoys them. This sort of rest-cure is worthy of a trial.

Book Reviews.

[Any book reviewed in these columns may be obtained, upon receipt of price, from the office of the Reporter.]

DISSOLUTION AND EVOLUTION, AND THE SCIENCE OF MEDICINE, Etc. By C. Pitfield Mitchell, member of the Royal College of Surgeons, England, etc. 8vo, pp. xiv, 246. London: Longmans, Green & Co., 1888. Price, Sixteen shillings.

This book contains an attempt to disseminate some new applications of Mr. Herbert Spencer's leading generalizations, especially as applied to the study of pathology. The style of the book may be inferred from the opening sentence: "Dissolution is a disintegration of matter and concomitant absorption of motion, during which the matter passes from a definite coherent heterogeneity to an indefinite, incoherent homogeneity, and during which the retained motion undergoes a parallel transformation."

The following study is of the most abstruse and perplexing character, and while it may attract a few men familiar with the terms and style of Mr. Spencer's works, we doubt that many of our readers will care to go quite through it. The argument leads up to certain so-called "practical deductions and conclusions." These, we regret to say, strike us as lame and impotent, and we lay the book aside with a sense of regret that so much energy should have been spent in preparing a treatise which must confuse, if it does not confound, those who look to it for light. The publishers' part in making this book has been very well done, but we can hardly forgive them for bringing it out without an index.

Pamphlet Notices.

[Any Reader of the Reporter who desires a copy of a pamphlet noticed in these columns will doubtless secure it by addressing the author with a request *stating where the notice was seen* and enclosing a postage stamp.]

State Protection Against Quackery. By Charles F. J. Lehlbach, M. D. The President's Address at the 72d Annual Meeting of the Essex District Medical Society, held at Newark, N. J., April 3, 1888. 19 pp.

Report of Proceedings of the Illinois State Board of Health. Quarterly Meeting. Chicago, April 19–20, 1888. 13 pp.

Migraine in Childhood. By Wharton Sinkler, M. D. From the Transactions of the Philadelphia County Medical Society, October 12, 1887. 8 pp.

The Legal Aspect of Suicide. Annual address before the Medical Judisprudence Society of Philadelphia, January 10, 1888. By Hon. Wm. N. Ashman, President of the Society. Published by the Society. 6 pp.

—Dr. Lehlbach's address is most attractively written, and describes the unsatisfactory conditions of medical practice in New Jersey, where any sort of a diploma carries with it the right to practice. Dr. Lehlbach very truly says that it is a mistake for the community to demand that medical men shall carry out some scheme to protect it from the dangers of quackery; and puts the responsibility where it belongs, namely: on the State. Still, like other public spirited physicians all over the land, he urges a plan which ought to require no urging from doctors, and gives his voice in favor of the establishment of a State Board of Examiners.

—One of the most interesting subjects considered in the report of the Illinois Board of Health—which is an excellent bulletin of its proceedings, strictly scientific and unpretentious—concerns the "Wear and Tear of the Medical Profession." Studying the facts in regard to about 14,000 physicians in Illinois, Dr. Rauch makes the annual death rate for ten years just passed to be about 13.3 per 1000. The annual death rate among physicians, for the first few years after entering practice, is lower than that for all males living in the State; between the ages of 40 and 60 years it is higher; and after this it becomes progressively lower up to the age of 80 years, after which it is enormously higher. The inferences to be drawn from the table presented in this report are exceedingly interesting, one of them being that a very large number of physicians must live longer than 80 years.

—Dr. Sinkler calls attention to the frequent occurrence, and the importance, of migraine in childhood. He points out the influence of heredity in producing it, and of poor food and air, loss of sleep and eyestrain in provoking it. The treatment suggested is indicated partly by its cause, and consists in securing good nutrition with as sparing a use of medicine as possible.

—Judge Ashman's address on suicide is of the most interesting and instructive character. It defines the legal view of suicide as it could be defined only by one learned in the law and skilled in saying what he means. It contains some very curious statements as to the way in which the law regards and treats those who succeed in the act of suicide or fail in the attempt, as well as those who prompt or aid it. The relation of insanity to attempts at suicide is briefly alluded to; and the author goes further than Prof. Reese, who denies that suicide is an evidence of sanity; for Judge Ashman thinks it is sometimes an evidence of unusually cool and deliberate reasoning. For the other interesting matter of this address, we must refer our readers to the pamphlet itself, which we promise them will amply repay them for the effort to secure a copy.

—Dr. Semeleder, of Mexico, writes to the *Medical Record*, April 7, 1888: "A man, forty-five years old, suffering from pneumonia, was treated by the dosimetric method, the following being one of his prescriptions, the figures representing granules to be taken at a dose. Bromocamphor, 8; quinine hydrobromate, 4; arbutine, 1; strychnine hypophosphate, 1; aconite, 1; veratrine, 1; digitaline, 1; sodium benzoate, 1; iodoform, 1; helenine, 1; musk 1. These were to be taken once in every two hours, that is to say, a new medicine every ten minutes. In addition, two granules of quassine were given every time the patient took any nourishment. He took an average of three hundred granules a day, or three thousand in the course of ten days; when he died. The cost of medication for this period was $45."

CORRESPONDENCE.

Veratrum Viride.

EDITOR MED. AND SURG. REPORTER:

Sir:—I am constrained to believe, from experience, that the profession have not entirely given veratrum viride its broadest position in the field of therapeutics. In acute pneumonia, a disease in which it is used most, I am inclined to think that its seemingly good effect of toning down the pulse, acts only as a mask for the subsequent heart failure induced by its administration. Indeed, I have been induced to believe that this drug is of little avail in any acute inflammatory affection. But it is in chronic blood diseases where veratrum viride wields its most beneficent influence as a remedy. Among these, syphilis offers a broad field for its action. If the disease is in its incipiency I usually give hyd. chlor. mite in one or two grain doses for about a week, and then stop it. I next order the patient to take Norwood's tincture veratrum viride, five drops ter die, immediately after eating, in water, for one week, when the night dose is increased one drop every night until the dose of ten drops is reached. I then keep the patient taking five drops after breakfast and dinner, and ten drops after supper, until the disease is expelled from the system. As adjuvants in the treatment I order the bowels to be kept open with saline aperients, the skin to be kept acting by a daily bath, and if there are chancres I either use iodoform liniment or calomel and iodoform powders in equal parts, applied three times per day. The use of alcoholic stimulants is strictly interdicted. In scrofulosis the drug is equally as efficacious. The treatment is about the same as in syphilis, except that there is no mercury used, and a good emulsion of cod-liver oil is employed and given with the veratrum. All glandular enlargements in scrofula, and buboes in syphilis are rapidly absorbed, and syphilitic laryngitis quickly relieved by veratrum. Syphilitic ophthalmia also shows its virtues by the rapid reduction and extinction of all inflammatory action, so soon as the system gets well under the alterative influence of the remedy.

The efficacy of veratrum in puerperal fever has, in recent years, been brought to the notice of the profession. I will add here, however, that the reflex influence upon the brain, and the detergent effect upon the circulatory system, of croton oil, administered in two drop doses until the bowels respond well to its action, greatly assists veratrum in controlling puerperal convulsions.

Yours truly, A. H. BYRD, M.D.

Burton's Hill, Ala., June 4, 1888.

Treatment of Wounds of the Palmar Arch.

EDITOR MED. AND SURG. REPORTER:

Sir:—Your editorial of June 2 recalls a case of mine in the summer of 1886. A young man came to my office with his hand wrapped in cloth soaked in blood, and from which the hemorrhage still continued very profusely. Upon taking off the bandages, I found a wound in the palm two inches in length extending entirely through all the tissues to the metacarpal bones, and from which the divided ends of three tendons protruded. I was unable to ligate the bleeding vessels, and after a discouragingly painful effort to stop the hemorrhage in that way, I soaked cotton in solution of alum, pressed it directly into the gaping wound, and securely binding it on, slung the arm up, and left it. I was very anxious about the results, as I had never seen anything of the kind recommended. The wound progressed very favorably; nothing occurred to prevent an excellent union of all parts. Should I have another case in which torn arteries in the palm of the hand could not be *easily* reached, I shall again use compression, as I deem it less painful and conducive to as good results as ligation in the palm, and while not as favorable for an exhibition of surgical implements and surgical skill (as regards cutting), as the wrist operation, it helps much to establish conservative surgery, from which the desire to cut naturally tends. Yours,

H. L. MANCHESTER, M.D.

Pawlett, Vt.,
June 6, 1888.

Blue Gum Negroes.

EDITOR MED. AND SURG. REPORTER:

Sir:—About two years ago, in the vicinity of Como, Miss., Mr. Douglas Durrett became involved in a difficulty with a *blue gum* negro, by whom he was bitten upon the hand. Inflammation and suppuration of the hand and arm ensued, from the effects of which he died in about ten days; the poisonous nature of the wound being attributed to the peculiar color of the the negro's gums. Others of the neighborhood were reminded of a similar instance which had come within their observation. And about May 1, near Victoria, Miss., Mr. William Cannon, while engaged in a fight with a *blue gum* negro, was bitten on the hand, and came near losing his life. The

newspaper in writing up the occurrence, stated that one of the medical attendants had never "heard of such a thing;" and another had only heard of two cases up North—reported, I suppose, by the Northern press.

Unable to recall any allusion in medical literature to the fact that the bite of persons possessing blue gums (no race, save the negro, has) is peculiarly poisonous, I write for light on the subject; and shall be glad to hear from you, or any other member of the profession. There being a *shadow* of foundation for such a belief, if by investigation the fact can be established beyond question, why should not our legislatures make the biting of another by an individual having *blue gums* something more of an offense than a mere *assault?*

Yours truly, A. A. YOUNG, M.D.
Clear Water Harbor, Fla.,
May 31, 1888.

Brother Come's Caustic Balsam.

EDITOR MED. AND SURG. REPORTER:

Sir:—Will the Editor, or some one of its contributors, give to the readers of the REPORTER, the receipt for Come Bros. Caustic Balm mentioned on page 538, April 28, 1888, and oblige.

Yours truly, SUBSCRIBER.
Wysox, Pa.
May 15, 1888.

EDITOR MED. AND SURG. REPORTER:

Sir:—In reply to yours of May 17, the following is the formula for Brother Come's caustic balsam, and the manner of using it:

℞ Arsenic. alb. (white arsenic).....1 gramme
Hydrarg. sulphuret. rubrum.....5 grammes
Spongia usta (calcinated sponge) 2 grammes
M.—Pulverize.

At the time of using it, water is added to this powder until it has the consistence of cream; it is then lightly applied with a brush on the ulcerated surfaces, taking care to use only a small quantity. It is better to apply it at different times at several days' interval, than to apply a great deal of it at once.

It is then covered with a piece of adhesive plaster, and kept in place until the eschar drops away, which occurs from the 10th to the 30th day.

If the ulcerated surface is very large, the treatment must be divided; not more than three square centimeters must be treated at once, on account of the danger of absorption; and a new portion must be cauterized only when the preceding eschar has fallen off.

If at the periphery of the ulcer there are dried tissues, these must be refreshened, for the caustic will act only on fresh or wet tissues.

Yours truly,
ARTHUR C. HUGENSCHMIDT, M.D.
Paris, France,
May 29, 1888.

NOTES AND COMMENTS.

Insoluble Pencils for the Urethra.

The *Monatshefte für prakt. Dermatologie* No. 5, 1888, states that in ulcerations and inflammations situated in the anterior portion of the urethra, or at the meatus, in which healing is rendered extremely difficult through the contact of the diseased parts with urine and the reinfection thus brought about, antiseptic pencils are of great service. Formulæ hitherto employed result in the common fault that the pencils are too brittle, can be moulded only with difficulty, and dissolve too quickly at the temperature of the body. The following formula is recommended:

℞ Olei theobromæ.....gr. xc
Ceræ albæ.....gr. lxxv
Acidi borici (*vel* iodoformi)....gr. xxx
Zinci oxidi.....gr. xv
Tragacanthæ.....gr. lx
M. ft. bacilli elastici.

These pencils can be made of any desired length or thickness, and for ease of introduction of a conical form. They keep the walls of the urethra separated, for they do not disappear for hours. They should not be used when, as in obstinate catarrh of the bladder, a powerful stream of urine is necessary to expel them.—*Allgemeine med. Central-Zeitung*, March 14, 1888.

Menstrual Bleeding from a Laparotomy Scar.

At a recent meeting of the Kiev Obstetrical and Gynecological Society, Professor Georg E. Rein showed (*Vratch*, No. 7, 1888, p. 136), a menstruating woman from whom he had about three years before removed a cyst of the right ovary weighing thirty-seven pounds, fixing the pedicle in the abdominal wound. The patient soon recovered, and the wound healed, but at one part of the scar there remained a diminutive slough, which fell off just before the beginning of menstruation, its separation being followed by a constant flow of blood from the denuded surface during the whole catamenial period. The phenomenon had regularly recurred monthly ever since. As a rule, the scar begins to bleed somewhat earlier than the uterine flow makes its appearance. The

menstrual blood from the cicatrix has a characteristic odor. It is difficult to explain such an occurrence. Possibly a Fallopian tube or one of the uterine cornua had been stitched together with the pedicle into the abdominal wound. However, Professor Rein hopes soon to ascertain the nature of this interesting and rare case, since the patient must undergo a second laparotomy for disease of the left ovary.—*British Med. Journal*, March 31, 1888.

Suggestion as to the Cure of Goitre.

French army surgeons have been profitably employed in drawing up medico-geographical reports of the French Departments. Surgeon-Major Aubert has already reported to the Académie de Médecine on Calvados, Loire-Inférieure, and La Vendée. On February 14, his report on the Medical Geography of the Ain was read. In reference to ninety-three men with goitre from the mountainous districts of that department, who were exempted from military service from 1872 to 1886, Dr. Aubert makes a most reasonable suggestion. As most cases of goitre between the ages of 18 and 20 are curable, a great service would be done to them by enrolling, instead of rejecting them, and placing them in the territorial army in healthier parts of France, particularly in coast stations. By sending these men far from their mountains to naval arsenals they might be permanently cured, and at least could not fail to derive great benefit from the change. —*British Medical Journal*, March 31, 1888.

Aromatic Vinegar.

The *American Druggist* gives the following as Dieterich's formula:

Tincture of benzoin	1 fl. oz.
Alcohol	1⅛ " "
Acetic Ether	1½ " "
Extract of jasmin	1½ " "
Acetic acid	3½ " "
Oil of rose	10 drops
Oil of Neroli	5 "
Oil of wintergreen	5 "

The Microbe of Infectious Endocarditis.

The *Gazette Hebdomadaire*, April 13, 1888, states that at a recent meeting of the *Société de Biologie* of Paris, M. Gibert announced that he had, in conjunction with M. Lion, cultivated a microbe found in a patient who had died of infectious endocarditis. The blood and the vegetation in the heart yielded the same microbe and only this one. When this was inoculated in rabbits it produced vegetative endocarditis without there having been previous valvular lesion.

Hydrophobia at Rio Janeiro.

A Pasteur Institute has been founded in the capitol of Brazil. In the reception-room for patients, there is hung a splendid photograph of Edelsfeldt's large picture, exhibited in Paris at the Salon, in 1886. It represents Pasteur in his laboratory, observing an inoculated marrow in a bottle. The Institute was inaugurated with great solemnity in the presence of the Ministers and most of the medical corps of Rio.

Novel Extension of the Uses of Cocaine.

Under this title Mr. E. Hurry Fenwick, in a communication to the *Lancet*, May 5, 1888, relates some remarkable experiences in the use of injections into the urethra of strong solutions of cocaine, for the purpose of relieving subacute pains remote in situation from the urethra. After citing several cases in which there was pain of a neuralgic or muscular character, he concludes that if pain in any part of the body be due to a *slight* nerve irritation of an unimportant character, a cocaine injection will rapidly relieve it; whereas, if the pain is due to a severe nerve irritation, a cocaine injection will not relieve it. He has applied cocaine in this way for the determination of the presence of organic or functional disease of the kidney, and has several times been able to verify his diagnosis through the patient's subsequently passing a small stone. He employs a 20 per cent. solution in water, and injects twenty or thirty drops.

Creasote in Chronic Affections of the Lungs in Children.

In the fiftieth report of the Wilhelm-Augusta Hospital at Breslau, Prof. Soltmann communicates the results of the treatment of chronic lung affections of children with creasote. He employed it in cases in which there were slight or progressive disturbances, without regard to the presence or absence of bacilli. The creasote was given to children in doses of from two to seven drops a day, while to adults, three, six or ten drops were ordered. His prescription is as follows:

Creosoti	gtt. iv–xiv
Sp. ætheris	gtt. vi–xij
Aquæ destill.	f℥iss
Sacch. albæ	gr. cl

M. Sig.—Teaspoonful every two hours.

The creasote was admirably borne without exception by all the children, and taken without resistance. Pain in the stomach, nausea, vomiting and diarrhœa never occurred, even when there was high fever. It is

noteworthy that in almost all cases the appetite increased, that the patients gained in weight with striking rapidity, their appearance became blooming, the cough and expectoration diminished, and gradually the symptoms of disease of the lungs disappeared.—*Wiener med. Presse*, April 22, 1888.

Influence of Salt upon the Secretion of the Stomach.

N. Reichmann publishes a communication in *Archiv für exper. Pathol. und Phar.*, Bd. XXIV, upon an experimental investigation concerning the local influence of salt upon the secretion of the stomach. By giving it when the stomach was empty, and before and after a test meal, he was able to determine that so far from increasing the secretion of gastric juice, it actually hinders it. The diminution of the acidity of the gastric juice, as was always proved after the introduction of sodium chloride, arises chiefly through transudation from the vessels of the mucous membrane, which is irritated by the salt; but the transudate is alkaline and neutralizes the hydrochloric acid.—*Deutsche med. Wochenschrift*, May 17, 1888.

Sulphonal.

In the *Berliner klin. Wochenschrift*, April 23, 1888, Rabbas communicates the results of his trials of sulphonal in the clinic for mental and nervous diseases at Marburg. He used the drug two hundred and twenty times upon a total of twenty-seven patients who were affected with different diseases. It was given in a wine-glassful of water. If any of the powder remained behind, it was washed down with water. Even the most excited patients offered scarcely any resistance to the taking of the medicine. Rabbas's conclusions are as follows: Sulphonal is a hypnotic which in moderate doses (30 to 45 grains) acts better and with more certainty than amylene hydrate and paraldehyde do in larger doses. Even in persons who are accustomed to narcotics its effect is successful. It is preferable to both the drugs just mentioned in respect to taste and odor. Chloral hydrate, it is true, produces sleep sooner, but its effect is not so continuous as that of sulphonal. Single doses of 30 or 45 grains usually produce a good effect in excited patients. When its administration has been continued for some time, an increase in the dose does not seem to be necessary. Sleep occurs for the most part in half an hour, more rarely in one or two hours and lasts uninterruptedly from six to eight hours or more; the sleep is entirely normal. Large doses, 60 grains, varying at short intervals with smaller doses of 30 and 45 grains, exercise no injurious influence upon the organism. In general, bad secondary effects do not occur even when the drug is given for a long time. Its absolute harmlessness as regards its action upon the heart, even when used a long time, makes it greatly preferable to chloral, the weakening effect of which upon the heart is generally known and dreaded. In a few cases sulphonal has failed.

Myxœdema and the Thyroid Gland.

At the meeting of the Clinical Society of London, May 25, Dr. Ord reported for the committee on myxœdema, appointed by the Society, the result of their investigation. These results are stated in the *Lancet*, June 2, 1888, in fourteen propositions. Without attempting to quote these at length, it may be said that the committee regards the presence of the thyroid body as absolutely essential, if there is to be no myxœdema, sporadic cretinism, or cachexia strumipriva. Complete removal or destruction of the thyroid gland, or loss of all its functions from any kind of disease, can, must and does cause myxœdema or its equivalent. If there is abolition of the thyroidic functions during early life, cretinism results; whereas, if the thyroid is slowly destroyed after puberty has been reached, myxœdema results. For the most part the destruction of the thyroid appears to be due to the growth of fibrous tissue in the organ, arresting its functions, and destroying its proper glandular tissue. It was stated by the committee that such a growth of fibrous tissue occurs in other parts of the body in cases of myxœdema.

National Association of Railway Surgeons.

The Committee for making arrangements for a National Meeting of Railway Surgeons, decided to hold the meeting in the City of Chicago in parlor O of the Palmer House, on the 28th day of June, at 9.30 A.M. It is desired that all railway surgeons attend this meeting and assist in organizing this National Association. Every surgeon who is in the employ of any railway company is invited to this meeting.

Monument to Pirogoff.

There is a movement in medical circles in Russia to erect a monument in St. Petersburg or Moscow to Pirogoff, the famous surgeon. The funds for this monument are to be raised by a general subscription throughout the whole Russian Empire.

Autopsy on the Emperor of Germany.

Telegraphic reports to the daily papers state that the post-mortem examination made upon the late Emperor of Germany was confined to a dissection of the neck, larynx and lungs. The larynx was found to have been destroyed by suppuration, and in its place was a cavity about the size of a clenched fist. Dr. Mackenzie is said to have stated that the disease was beyond doubt cancer of the larynx. He adds that the diagnosis was rendered very difficult, as the disease attacked the cartilages of the larynx at the outset, and afterwards developed chiefly in the lower part of the larynx.

A somewhat different account states that in addition to the destruction of the larynx purtrid bronchitis also existed, as the result of inspiration of putrescent particles into the bronchial tubes. The whole larynx is said to have been in a state of suppuration, presenting a soft, lumpy mass, with scarcely any trace of cartilaginous structure remaining. There was nothing to show the existence of perforation of the walls separating the trachea and œsophagus. The choking sensation from which the Emperor suffered during the last days of his life, which was attributed to such perforation, appears to have been really due to collapse of the larynx, owing to the destruction of the cartilage.

Warner and Warner.

It is somewhat surprising to find in the *Centralblatt für Chirurgie*, May 26—one of the most esteemed medical journals of Germany—an advertisement of "Warner's Safe Cure," which asserts that the remedy is already much used by physicians in their practice, that there is a depot for its sale at Frankfort-on-the-Main, and that specimen bottles will be sent free to all physicians who wish it.

It is curious that this happens just at a time when William R. Warner & Co. of this city have felt called upon to deny as calumnious, the charge or imputation that they are the makers of this preparation. In this country, the articles made and sold by Mr. Warner, of Philadelphia, are on a very different footing from the much advertised "safe cures;" and we do not wonder that he is indignant to have it intimated that he is the maker of the latter. If our German cousins knew how the "safe cures" are regarded by the medical profession here, they would hardly find such a welcome as is indicated by the advertisement we have referred to. There may be some confusion abroad in regard to the different Warners; but we think there is no confusion in regard to them here.

Hydrastis Canadensis.

Dr. Thomas Oliver, in a communication to the *Lancet*, May 5, 1888, upon clinical experience of some of the more recently introduced drugs, says of hydrastis that it certainly does restrain the flow of blood in myofibromata, but that it is in cases of menorrhagia, in which loss of blood depends upon a para- or a peri-metritis, that its efficacy is most marked. It not only relieves ovarian pain, but it has checked uterine hemorrhage in cases in which there has been such evidence of inflammation outside and immediately around the uterus, that intra-uterine medication could not have been attempted. The drug has, in his hands, had little if any effect upon uterine hemorrhage dependent upon mucous polypi. It soothes ovarian pain, acute or chronic, and checks the bleeding in the latter; it checks the bleeding of endometritis, and relieves that unpleasant pain which prevents the woman thus affected from either sitting or walking; it relieves, and in many cases, he says, has arrested the hemorrhage due to puerperal metritis and chronic peritonitis; and in many instances it has relieved the headache so frequently complained of by women who are the subjects of chronic inflammatory affections in and around the uterus and ovaries.

In cases of pelvic peritonitis, associated with ovarian pain and uterine hemorrhage, the combination of hydrastis and salix nigra, he says, has proved of signal service. Further, in the highly nervous condition into which some women are so frequently thrown soon after the climacteric, salix nigra and hydrastis canadensis in combination, have answered well.

Suicides in London and New York.

The *Lancet*, June 2, 1888, from an examination of the statistics of suicides occurring in New York and in London, concludes that in New York suicide is, generally speaking, committed at an earlier age than in London. It admits, however, that this may be due to the much larger foreign element in New York as compared with London, as there is good reason, it says, for believing that an examination of the ages at which suicides are committed in Continental Europe would show that suicides take place there at an earlier age than they do in England.

Rachitis.

Schwarz (*Medizinische Jahrbücher*, 1887), has demonstrated, by an examination of 500 children within an hour after birth, at the lying-in hospital in Vienna, that the signs of rachitis can usually be found at that early period, showing the disease to be, at least usually, intra-uterine in its commencement. To a very large extent he confirms the usual impressions regarding etiology and pathology. Of the 500 children examined, 97 were without sign of this disease, 188 had well marked rachitic rosaries, together with rachitic changes of the cranial bones, varying from an abnormal weakness along the borders of the sagittal suture to an almost complete defect of ossification of the cranium; 155 had well marked rachitic rosaries without the changes in the cranial bones; 36 had the changes in the cranial bones alone, and 24 presented only slight swellings at the union of the bones and cartilages of the ribs. Of the children born in the seventh lunar month, 14 were rachitic, 1 normal; in the eighth lunar month, 27 rachitic, 4 normal; in the ninth lunar month, 50 rachitic, 12 normal. Fifteen of the mothers of rachitic children presented signs of having suffered from a high grade of rachitis. Of six cases of twins, in three one child was normal, while the other was rachitic; in the others both children were rachitic. His conclusion is that every child should be examined as soon after birth as practicable, and, if any signs of rachitis are found to be present, active treatment should be immediately instituted.—*N. Y. Medical Journal*, March 31, 1888.

The Incompatibility of Antiseptics.

Dr. Boxall calls attention to a very important point in connection with the employment of mixed antiseptics. He has ascertained that mixtures of corrosive sublimate and iodine, iodine with carbolic acid, and carbolic acid and olive oil, produce chemical changes which materially affect the properties of the original constituents. He found, moreover, that soap and glycerine are, as a rule, bad vehicles for antiseptics. Perchloride of mercury, iodine, salicylic acid, and permanganate of potassium are changed or precipitated by admixture with soap. It is evident, therefore, that some little discrimination is necessary before we employ other than simple solutions of the principal antiseptics.—*Medical Press and Circular*, May 2, 1888.

Purpura Hemorrhagica after a Mental Shock.

Dr. Ed. de Smet, of Brussels, has recently had a case in which a young woman of a highly nervous temperament, in consequence of a severe fright, experienced an eruption of purpura hemorrhagica, though she had never had any eruption of the kind before. Some four months subsequently, however, in consequence of a fall, a similar eruption made its appearance. The treatment was directed mainly to the nervous system, which had evidently been very much affected. The author refers to M. Lenoir, of Lille, who has published cases of various skin diseases—eczema, psoriasis, herpes, pemphigus, and vitiligo—which have followed a mental shock.—*Lancet*, March 17, 1888.

Antiseptic Ammunition.

A useful suggestion is just being carried out by the Netherland Government, by which provision will be made for supplying each soldier, during the time of war, with a cartridge containing some antiseptic dressings. Each cartridge will be made of convenient size, namely about ten centimetres in length, by five in width, and will be secured at one end with a safety pin. The dressings contained in each will consist of a bandage, about three metres long, and two pieces of gauze, all of which have been rendered antiseptic by a sublimate solution. Hence, in the event of wounds being received a ready means would be at hand for the immediate application of antiseptic dressings. Soldiers, in the case of slight injuries, would probably at once avail themselves of the dressings, and the latter could not fail to be of much use to the surgeons. The idea is well worthy of the attention of the military authorities in this country, and might even with advantage be adopted, as it has been for years past in the German army. In the wars in which, during the past few years, we have been engaged in tropical climates, the early application of antiseptics to the wounds received by the men was admitted to be a matter of the utmost importance by the army medical officers attached to the forces.—*Medical Press and Circular*, May 9, 1888.

Accident from the Explosion of Chlorate of Potassium Tablets.

The *Canada Pharmaceutical Journal*, June, 1888, says: A prominent tenor of this city was lately engaged to sing at the opening ceremony of one of our churches, and feeling somewhat hoarse, supplied himself with

some tablets of chlorate of potassium, which he put into his pocket, which also contained matches. Just before the critical moment of the performance he had recourse to the remedy, and, fumbling hastily in his pocket, produced friction sufficient to initiate an interesting reaction, which is, however, more adapted to the chemical lecture desk than the platform of the vocalist. The result was striking and produced a decided sensation, and though it was at first feared that the singer had lost several important vital organs, it was found on investigation that he escaped with some damage to his clothing, and a very severe burn on his hand.

Treatment of Penetrating Gun-Shot Wounds of the Cranium.

Dr. Joseph D. Bryant, in a paper read before the Medical Society of the State of New York (*N. Y. Med. Journal*, May 5, 1888) concludes that:

1. A bullet should be removed from the brain as soon after its reception as its situation can be determined and the patient's condition will permit.

2. A bullet should be removed from the brain at a later period if symptoms supervene and it can be located.

3. A bullet that has been located in the brain and has not been removed, should be removed before the supervention of symptoms, when it assumes a migratory character.

4. No effort should be made to remove a ball from the brain if it cannot be located.

Pigmentations in Pregnancy.

The *Journal of Cutaneous and Genito-Urinary Diseases*, May, 1888, says Dr. Monin recommends the following:

℞ Cocoa butter,
Castor-oil āā .....ʒiiss
Oxide of zinc.....gr. v
White precipitate.....gr. ij
Essence of rose.....gr. ij–x

M. S.—Apply morning and night.

—The bill abolishing hanging for all murders committed after January 1, 1889, and providing that the execution in New York shall be carried out by the use of electricity, was signed June 4 by Governor Hill. The bill further provides that the court delivering the sentence shall name merely the week within which the execution shall take place, the day of execution being left to the discretion of the principal prison officer.

NEWS.

Dr. Mark Hovell threatens to sue the London *Times* for publishing assertions with reference to his action in the case of the late Emperor of Germany, which are regarded by Dr. Hovell as libellous.

—Some of the Dublin Hospitals are to receive large sums of money from the estate of the late Mr. William Bannon. The amount which each of the favored hospitals will receive has been estimated at thirty thousand dollars.

—Dr. Paul F. Mundé will give the lectures on Gynecology before the Dartmouth Medical College this year, and Dr. William H. Parish those on Obstetrics. The vacancy caused by Dr. Dunster's death has not yet been filled.

—The French Academy of Sciences is interested in regard to the recent discovery of a sulphurous mineral water in the very heart of Paris. While digging for the foundations of a hospital building on the Ile Saint-Louis, sulphurous springs were found at a depth of about 35 feet from the surface.

—The *Deutsche med. Wochenschrift*, April 12, 1888, informs its readers that it has been discovered that "Gleditschine" is a mixture of atropine and cocaine! If the Germans had been using this now long-exploded mixture, they would no doubt have found out sooner that it had but a brief day in America.

—The faculty of Harvard Medical College has recommended the following appointments to the Board of Overseers: Dr. Frederick I. Knight to be Professor of Laryngology; Dr. William H. Baker to be Professor of Gynecology, and Dr. Clarence J. Blake and Dr. J. Orne Green to be Professors of Otology and Clinical Otology.

—The Philadelphia *Ledger*, May 28, 1888, says: "Rev. Dr. Newman, the newly elected M. E. Bishop—Dr. Lawrence, a noted spiritualist declares—was once persuaded to try for a serious ailment a remedy which was obtained by spiritualistic mediumship, and was cured by it. None genuine unless the name of the medium is blown on the bottle."

—A Chest and Throat Dispensary has been inaugurated at 411 Spruce Street, this city, under the auspices of the city mission of the Protestant Episcopal Church. Drs. F. P. Henry, Thos. J. Mays and Wm. M. Angney constitute the medical staff of the Chest Department, and Drs. A. W. Watson and C. Jay Seltzer that of the Throat Department.

—Basing his statement on an exhaustive study of official documents, M. Marambat stated, at a recent meeting of the Academy of Medicine of Paris, that the increase in crime is in a large measure due to the use, or rather the abuse of spirits. He has been enabled to obtain positive data in the case of 3,000 prisoners, among whom there were 2,124 confirmed inebriates: a proportion of 72 per cent.

—The Pennsylvania State Dental Society held its annual session in Philadelphia, June 7, at the College of Physicians. A number of interesting papers were read, and an animated discussion was held as to the admission of visiting members of the medical and dental professions to the meetings, and upon a majority vote to take part in the discussions. The motion was made by Dr. Truman, but was finally voted down.

—At the competitive examination held by the Board of Charities and Correction to select a successor to Miss Fisher as head of the Training School for Nurses at the Philadelphia Hospital, Miss Marian E. Smith was the successful candidate. Miss Smith was formerly one of Miss Fisher's assistants at the Philadelphia Hospital, which she left in order to accept the position of Superintendent of the Training School at the Pennsylvania Hospital.

HUMOR.

LOOK OUT FOR THE MAN who is advertising an infallible cure for a corn, price $1, and money refunded if the corn does not disappear. If you send him a dollar you will receive by return mail the following recipe: "Cut off your toe."

THIS IS TRULY AN AGE OF ICONOCLASM. A cold-blooded scientist now comes forward to say that the old oaken bucket, celebrated in song and story, is simply an iron-bound death dealer, a condensed mass of nitrogenous and phosphatic filthiness, and the home of the microbe and bacterium.

"I HAVE A GOOD MIND to lay off and rest a couple of weeks," said a young journalist, wearily, as he finished a thrilling ten-line notice of Brown's bakery and leaned back in his chair. "You have that," warmly exclaimed the grizzly old newspaper man, who was wrestling with two columns of telegraph and a stack of proof. "You have the best mind to rest with that I ever saw."—*Exchange.*

MAGISTRATE (to prisoner)—"You say, Uncle 'Rastus, that you took the ham because you are out of work and your family are starving. And yet I understand that you have four dogs about the house." Uncle 'Rastus—"Yes, sah, but I wudden ask my family to eat dogs, yo' honah!"

THE OTHER DAY AN EXQUISITE told the daughter of a prominent official—an unusually clever young woman—that he always slept in gloves because it made his hands so soft.

"Do you sleep in your hat, too?" artlessly inquired the damsel.

There was no reply; and I half suspect that the young man thought at the moment that his fair questioner was out of her mind. —*Boston Journal of Health.*

MARRIAGE.

SEYBERT—WIESS.—June 20, 1888, Dr. Frank F. Seybert (Jeff. Med. Col., 1881) to Ida B., daughter of Mr. and Mrs. F. Ferd. Wiess, of Council Bluffs, Iowa.

OBITUARY.

DR. DAVID MERRITT.

Dr. David Merritt, who recently died at his residence in Philadelphia, was born at St. John, New Brunswick, in 1830. He came to this city when nineteen years of age, and began the study of medicine, and was graduated at the Pennsylvania Medical College in March, 1851. He practised his profession until the breaking out of the war, when he joined the 55th Regiment, Pennsylvania Volunteers, under Colonel Richard White. After serving three years as surgeon with that body, he connected himself with the Hancock Veteran Corps, serving in the same capacity until the close of the war. He resumed his practice in this city, and three years ago he had an attack of empyema, which eventually caused his death. He leaves a widow, a son and a daughter.

CARL L. JENSEN, M.D.

Carl L. Jensen, a well-known manufacturing chemist, who resided at No. 2039 Green street, Philadelphia, died of typhoid fever in New York City, June 9, after a short illness. He was in his 43d year, and was born in Denmark, graduating as a chemist at Copenhagen. He came to this country in 1869, and for the last eight years lived in Philadelphia, where he devoted himself to the manufacture of preparations of pepsin. He leaves a widow and three children.

JOHN WIEGAND SNOWDEN, M.D.

Dr. John Wiegand Snowden was born in Philadelphia, April 22, 1823. He was the son of Thomas and Sarah M. Snowden. His father was for over thirty years associated in business with John Wiegand, as manufacturers and importers of surgical instruments in Philadelphia. Thomas Snowden took an active part in public affairs in Philadelphia prior to 1854, and represented the old South Mulberry ward for many years in its Common and Select Councils, serving for ten years as President of the former.

Dr. Snowden was educated at the Engle Classical School in Philadelphia. He assisted Dr. George McClellan as demonstrator of anatomy, and was graduated from the Medical Department of the University of Pennsylvania in 1844. He began the practice of medicine in his native city, but soon removed to Middletown, Delaware, and thence to Chew's Landing, Camden county, New Jersey. He was of feeble constitution, and subject to pulmonary diseases. Learning from the natives that a residence in the barrens of New Jersey, called the Pines, was a sovereign remedy for these affections, he removed in 1846 into what was then the centre of that wilderness, near where is now the Ancora Station, on the Camden and Atlantic Railroad. In June, 1849, he joined the Camden County Medical Society, and was at his death the oldest member on its roll. He had filled all the important offices in the Society, having been twice its President, and for nine years Chairman of its Standing Committee, resigning in 1887, in consequence of ill health. He was a member of the New Jersey State Medical Society, and its President in 1882. He was also a member of the American Medical Association, and of the Obstetrical Society of Philadelphia.

A few years before his death he removed from Ancora to Hammonton, six miles below the former place, and just within the limits of Atlantic county, where he died May 28, 1888.

At a special meeting of the Camden County Medical Society, held May 30, 1888, the following was ordered to be placed upon the minutes:

In the death of Dr. John W. Snowden, who was a member of this Society for thirty-nine years, who rarely was absent from its meetings, who filled its highest posts of honor, maintained its dignity, and used his rich fund of experience and ripe judgment in the interest of harmony, this Society has sustained a great loss.

We commend to the members of the Society this bright example of the *true physician*, one who for forty years, by night and by day, in sunshine and in storm, devoted talents worthy of a more brilliant theatre, to the people of a sparsely settled district, and ministered with great medical skill to alleviate their sickness and sufferings, and often with true Christian piety furnished them with spiritual consolation.

We extend to his bereaved family our sincere sympathy in their sorrow and loss, knowing that, although his place cannot be filled, their and our remembrance of him will be of one who in all his relations in life, both public and private, was the embodiment of purity, honor and dignity.

H. GENET TAYLOR, M.D.,
E. P. TOWNSEND, M.D.,
E. L. B. GODFREY, M.D.,
DANIEL STROCK, M.D.
J. F. WALSH, M.D.,
Committee.

RACHEL L. BODLEY, M.D.

Dr. Rachel L. Bodley, Dean of the Women's Medical College of Pennsylvania, died at Philadelphia, June 15. She had been suffering with heart trouble, but was not taken seriously ill until June 12, when she began to fail rapidly.

Dr. Bodley was born in Cincinnati, O., December 7, 1831. In 1844 she entered the Wesleyan Female College, in that city, and was graduated after a course of five years. She was then appointed a teacher and remained until 1860, advancing to the position of preceptress in the higher collegiate studies. She came to Philadelphia in the autumn of that year, and became a special student in advanced chemistry and physics in the Polytechnic College. She returned to Cincinnati in February, 1862, and was appointed Professor of Natural Sciences in the Cincinnati Female Seminary, which position she held three years. In 1865 she was called to the chair of chemistry and toxicology in the Women's Medical College of Pennsylvania. She accepted and thus became the first woman professor of chemistry. She was elected Dean of the Faculty in January, 1874, and from that time until her death she devoted herself exclusively to the college, promoting its interests and striving to elevate her sex, and to secure for woman and her work respect and recognition.

In 1879 the honorary degree of M.D. was conferred upon her by the Women's Medical College of Pennsylvania.

In 1880 she was made a member of the Franklin Institute, and was the first woman to deliver any extended course of lectures in the Institute.

Not the least of her services to the city was her service as School Director of the Twenty-ninth Section School Board, which position she held at the time of her death.